

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	580	((optical or laser or imformation) near5 (medium or media or disk\$1 or disc\$1)) and (cyanine or methine)	JPO	OR	ON	2005/12/08 13:54
L2	17	((optical or laser or imformation) near5 (medium or media or disk\$1 or disc\$1)) and (trimethine)	JPO	OR	ON	2005/12/08 14:55
L3	484	((optical or laser or imformation) near5 (medium or media or disk\$1 or disc\$1)) and (cyanine)	JPO	OR	ON	2005/12/08 14:30
L4	102	I3 and (s or sulfur or o or oxygen or oxazol\$6 or thiazol\$6)	JPO	OR	ON	2005/12/08 13:55
L5	382	I3 not I4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 14:34
L6	8	I5 and (blue or green or argon or hecd or "ar+" or "he-cd" or (helium near5 cadmium))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 14:32
L7	8	I5 and ("488" or "422" or "425" or "457" or "461" or "325" or blue or green or argon or hecd or "ar+" or "he-cd" or (helium near5 cadmium))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 14:32
L8	180	I5 and @ad<"19900101"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 14:34
L9	33	((optical or laser or imformation) near5 (medium or media or disk\$1 or disc\$1)) and (trimethine)	EPO; DERWENT; IBM_TDB	OR	ON	2005/12/08 14:55

\$%^STN;HighlightOn= ***;HighlightOff=*** ;

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NEWS 3 SEP 09 ACD predicted properties enhanced in REGISTRY/ZREGISTRY
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FILE 'HOME' ENTERED AT 15:25:35 ON 08 DEC 2005

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 15:25:41 ON 08 DEC 2005

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Dec 2, 2005 (20051202/UP).

```
=> FIL HOME
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                                ENTRY      SESSION
FULL ESTIMATED COST          0.06          0.27
```

FILE 'HOME' ENTERED AT 15:25:45 ON 08 DEC 2005

```
=> file reg
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                                ENTRY      SESSION
FULL ESTIMATED COST          0.21          0.48
```

FILE 'REGISTRY' ENTERED AT 15:25:55 ON 08 DEC 2005
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STRUCTURE FILE UPDATES: 7 DEC 2005 HIGHEST RN 869534-51-0
DICTIONARY FILE UPDATES: 7 DEC 2005 HIGHEST RN 869534-51-0

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* effective March 20, 2005. A new display format, IDERL, is now     *
* available and contains the CA role and document type information. *
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```
=>
Uploading c:\program files\stnexp\queries\10657205thioazoles.str
```

L1 STRUCTURE UPLOADED

```
=>
Uploading c:\program files\stnexp\queries\10657205oxazoles.str
```

L2 STRUCTURE UPLOADED

```
=> s l1 sss full
FULL SEARCH INITIATED 15:26:35 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 17382 TO ITERATE
```

100.0% PROCESSED 17382 ITERATIONS 12 ANSWERS
SEARCH TIME: 00.00.01

L3 12 SEA SSS FUL L1

```
=> s l2 sss full
FULL SEARCH INITIATED 15:26:40 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 6705 TO ITERATE
```

100.0% PROCESSED 6705 ITERATIONS
SEARCH TIME: 00.00.01

3644 ANSWERS

L4 3644 SEA SSS FUL L2

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

322.66

323.14

FILE 'CAPLUS' ENTERED AT 15:26:57 ON 08 DEC 2005

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FILE LAST UPDATED: 7 Dec 2005 (20051207/ED)

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<http://www.cas.org/infopolicy.html>

=> s l3

L5 21 L3

=> s l4

L6 2443 L4

=> s (optical or laser or information) and l5

852210 OPTICAL

19 OPTICALS

852218 OPTICAL

(OPTICAL OR OPTICALS)

507725 LASER

158383 LASERS

520833 LASER

(LASER OR LASERS)

390727 INFORMATION

2981 INFORMATIONS

393115 INFORMATION

(INFORMATION OR INFORMATIONS)

L7 3 (OPTICAL OR LASER OR INFORMATION) AND L5

=> d all 1-3

L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:685872 CAPLUS

DN 139:221678

ED Entered STN: 03 Sep 2003

TI ***Optical*** recording material containing dye salt from cyanine dye cation and azo-metal chelate anion

IN Ueno, Yasunobu; Sato, Tsutomu; Tomura, Tatsuya; Noguchi, Shu

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41M005-26

ICS G11B007-24; C09B023-00; C09B045-44

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
Section cross-reference(s): 41

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003246149	A2	20030902	JP 2002-50403	20020226
PRAI	JP 2002-50403		20020226		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2003246149	ICM	B41M005-26
	ICS	G11B007-24; C09B023-00; C09B045-44

OS MARPAT 139:221678
GI

/ Structure 1 in file .gra /

AB The material comprises a support coated with a recording layer contg. a dye salt of a cyanine dye cation I [A, B = arom. ring; R9-10 = (un)substituted alkyl] and an azo-metal chelate anion from an azo compd. II [R1-8 = H, halo, nitro, cyano, OH, carboxy, amino, alkyl, aryl, alkylcarbonyl, arylcarbonyl, alkyloxycarbonyl, aryloxycarbonyl, alkylsulfonyl, arylsulfonyl, alkylthio, arylthio, alkylthioxy, arylthioxy, alkyloxy, aryloxy, alkylamino, arylamino, alkylcarbonylamino, arylcarbonylamino, alkylcarbamoyle, arylcarbamoyle, alkenyl, alkylsulfinio, alkylaminosulfinio, sulfo, these groups may be substituted; X = active H], and metal, metal oxide, or metal salt. The material shows good lightfastness and storage stability and is useful or DVD-R disk system using shorter ***laser*** beam.

ST ***optical*** recording material; salt cyanine dye cation azo metal chelate

IT ***Optical*** recording materials
(***optical*** recording material contg. dye salt from cyanine dye cation and azo-metal chelate anion)

IT 13963-57-0D, Aluminum acetylacetonate, reaction products azo dye, salts with cyanine dye 14024-18-1D, Iron acetylacetonate, reaction products azo dye, salts with cyanine dye 14284-89-0D, Manganese acetylacetonate, reaction products azo dye, salts with cyanine dye 14284-92-5D, Rhodium acetylacetonate, reaction products azo dye, salts with cyanine dye 15653-01-7D, Cerium acetylacetonate, reaction products azo dye, salts with cyanine dye 18403-49-1D, salts with azo-metal chelate anion 18466-01-8D, salts with azo-metal chelate anion 20187-38-6D, salts with azo-metal chelate anion 21679-31-2D, Chromium acetylacetonate, reaction products azo dye, salts with cyanine dye 21679-46-9D, Cobalt acetylacetonate, reaction products azo dye, salts with cyanine dye 37069-75-3D, salts with azo-metal chelate anion ***46824-14-0D***, salts with azo-metal chelate anion 124710-31-2D, salts with azo-metal chelate anion 586390-36-5D, salts with azo-metal chelate anion 587878-51-1D, reaction products with metal compd., salts with cyanine dye 587878-52-2D, salts with azo-metal chelate anion 610311-36-9D, reaction products with metal compd., salts with cyanine dye 610311-37-0D, reaction products with metal compd., salts with cyanine dye 610311-38-1D, reaction products with metal compd., salts with cyanine dye 610311-39-2D, reaction products with metal compd., salts with cyanine dye 610311-40-5D, reaction products with metal compd., salts with cyanine dye
RL: DEV (Device component use); USES (Uses)

(***optical*** recording material contg. dye salt from cyanine dye cation and azo-metal chelate anion)

IT 587878-45-3DP, reaction products with metal compd., salts with cyanine dye
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(***optical*** recording material contg. dye salt from cyanine dye cation and azo-metal chelate anion)

L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:673692 CAPLUS
DN 139:205097

ED Entered STN: 28 Aug 2003
 TI ***Optical*** recording material containing dye salt from azo-metal
 chelate and cyanine dye
 IN Ueno, Yasunobu; Sato, Tsutomu; Tomura, Tatsuya; Noguchi, Osamu
 PA Ricoh Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 19 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM B41M005-26
 ICS G11B007-24; C09B023-00; C09B045-20; C09B069-02
 CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 41
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003237240	A2	20030827	JP 2002-44862	20020221
PRAI	JP 2002-44862		20020221		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2003237240	ICM	B41M005-26
	ICS	G11B007-24; C09B023-00; C09B045-20; C09B069-02

OS MARPAT 139:205097
 GI

/ Structure 2 in file .gra /

AB The material comprises a support coated with an ***optical***
 recording layer contg. a dye salt comprising (A) an azo-metal chelate
 anion from an azo dye I [R1-6 = H, halo, nitro, cyano, OH, carboxy, amino,
 alkyl, aryl, alkylcarbonyl, arylcarbonyl, alkyloxycarbonyl,
 aryloxycarbonyl, alkylsulfonyl, arylsulfonyl, alkylthio oxy, arylthio oxy,
 alkyloxy, aryloxy, alkylamino, arylamino, alkylcarbonylamino,
 arylcarbonylamino, alkylcarbamoyle, arylcarbamoyle, alkenyl, these groups
 may be substituted] and a metal, metal oxide, or metal salt, and (B) a
 cyanine dye cation II (A, B = arom. ring; R7-8 = (un)substituted alkyl).
 The material shows good lightfastness, storage stability, is recorded and
 read by semiconductor ***laser*** beam with shorter wavelength, and
 suited for large capacity WORM disk.

ST ***optical*** recording material azo metal chelate cyanine dye
 IT Azo dyes
 Cyanine dyes

Optical recording materials
 (***optical*** recording material contg. salt from azo-metal
 chelate and cyanine dye)
 IT ***Optical*** disks
 (write-once read-many; ***optical*** recording material contg. salt
 from azo-metal chelate and cyanine dye)

IT 13963-57-ODP, Aluminum acetylacetonate, azo dye chelate, salts with
 cyanine dye 14024-18-1DP, Iron trisacetylacetonate, azo dye chelate,
 salts with cyanine dye 14284-89-ODP, Manganese trisacetylacetonate, azo
 dye chelate, salts with cyanine dye 14284-92-5DP, Rhodium
 tris(acetylacetonate), azo dye chelate, salts with cyanine dye
 14284-96-9DP, Titanium tris(acetylacetonate), azo dye chelate, salts with
 cyanine dye 15653-01-7DP, Cerium tris(acetylacetonate), azo dye chelate,
 salts with cyanine dye 18466-01-8DP, salts with azo-metal chelate
 20187-38-6DP, salts with azo-metal chelate 21679-31-2DP, Chromium
 acetylacetonate, azo dye chelate, salts with cyanine dye 21679-46-9DP,
 Cobalt acetylacetonate, azo dye chelate, salts with cyanine dye
 46824-14-ODP, salts with azo-metal chelate 52078-77-ODP, salts
 with azo-metal chelate 586390-20-7DP, metal chelate, salts with cyanine
 dye 586390-21-8DP, metal chelate, salts with cyanine dye
 586390-23-ODP, metal chelate, salts with cyanine dye 586390-24-1DP,
 metal chelate, salts with cyanine dye 586390-25-2DP, metal chelate,
 salts with cyanine dye 586390-26-3DP, metal chelate, salts with cyanine
 dye 586390-27-4DP, metal chelate, salts with cyanine dye
 586390-28-5DP, metal chelate, salts with cyanine dye 586390-30-9DP,
 metal chelate, salts with cyanine dye 586390-31-ODP, metal chelate,

salts with cyanine dye 586390-32-1DP, metal chelate, salts with cyanine dye 586390-34-3DP, metal chelate, salts with cyanine dye 586390-36-5DP, salts with azo-metal chelate 586390-37-6DP, salts with azo-metal chelate 586390-38-7DP, salts with azo-metal chelate 586390-39-8DP, salts with azo-metal chelate 586390-40-1DP, salts with azo-metal chelate 586390-41-2DP, salts with azo-metal chelate 586390-42-3DP, salts with azo-metal chelate 586390-43-4DP, salts with azo-metal chelate 586390-44-5DP, salts with azo-metal chelate 586390-45-6DP, salts with azo-metal chelate 586390-46-7DP, salts with azo-metal chelate 586390-47-8DP, salts with azo-metal chelate 586390-48-9DP, salts with azo-metal chelate 586390-49-0DP, salts with azo-metal chelate 586390-50-3DP, salts with azo-metal chelate 586390-51-4DP, salts with azo-metal chelate 586390-52-5DP, salts with azo-metal chelate 587868-95-9DP, metal chelate, salts with cyanine dye 587868-96-0DP, metal chelate, salts with cyanine dye 587868-99-3DP, metal chelate, salts with cyanine dye 587869-00-9DP, metal chelate, salts with cyanine dye

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(***optical*** recording material contg. salt from azo-metal chelate and cyanine dye)

L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:17951 CAPLUS
 DN 138:262613
 ED Entered STN: 09 Jan 2003
 TI Silver halide photographic material
 IN Lifshits, E. B.; Medvedeva, A. V.; Podlesnykh, V. N.; Silaev, E. A.; Ushomirskii, M. N.; Formina, L. V.
 PA Zakrytoe Aktsionernoe Obshchestvo Nauchno-Proizvodstvennoe Obedinenie "FOMOS", Russia
 SO Russ., No pp. given
 CODEN: RUXXE7
 DT Patent
 LA Russian
 IC ICM G03C001-08
 ICS C09B023-00
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2184387	C1	20020627	RU 2000-132281	20001222
PRAI RU 2000-132281		20001222		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
RU 2184387	ICM	G03C001-08
	ICS	C09B023-00

GI

/ Structure 3 in file .gra /

AB A high sensitivity AgBrI material (microcrystal size 0.15-0.5 .mu.m, AgI content 2-5 mol%) which is particularly useful for space photog. comprises a support coated on one side with a gelatin counter-layer contg. antihalation dyes and on the other side with silver halide emulsion layer. The emulsion contains: (a) spectral sensitizers I (A = H, lower alkyl; R and R1 = lower alkyl, (CH2)3SO3-; Z = .beta.-naphtho-, 4,5- benzo- or B-Ph (B = H, alkyl, halogen); Z1 = .beta.-naphtho-, 4,5-benzo-, thieno[3,2]benzo-, 2,3-dimethylthiophene, B1-Ph (B1 = H, alkyl, alkoxy, aryl); or Z and Z1 are missing; X- = halogen or p-toluenesulfonyl; [K]+ = ammonium, trialkylammonium, pyridinium, 1,1'-diethyl-2,2'-quinomonomethyncyanine, 3,3'-diethyl-oxacarbocyanine, 3,3'-diethylthiazoline-carbocyanine); (b) spectral sensitivity activator II (B and B1 = H, lower alkyl, halogen; m = 1, 2; n = 0-2; X- = perchlorate, halogen, p-toluenesulfonyl ion); (c) an antihalation and stabilizing agent III (R, R1 = lower alkyls). The light-sensitive counter-layer, and protective layer contain Bu acrylate-styrene-methacrylic acid copolymer. The above material has high resoln. power, optimized relation of

light-sensitivity to resolu. power, and high ***information*** d.
ST photog material astronomy space
IT Photographic films
Photographic sensitizers
Photographic stabilizers
(high sensitivity AgBrI material for space photog.)
IT 169223-07-8 502935-63-9 502935-68-4 502935-70-8
RL: TEM (Technical or engineered material use); USES (Uses)
(activator; high sensitivity AgBrI material for space photog.)
IT 25036-16-2, Butyl acrylate-styrene-methacrylic acid copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(high sensitivity AgBrI material for space photog.)
IT ***10525-27-6*** 55929-55-0 ***65087-25-4*** 68239-10-1
125306-79-8 139536-88-2 235416-50-9 501087-26-9 501087-28-1
502935-62-8 502935-64-0 502935-66-2 502935-67-3 502935-72-0
502935-76-4 502935-78-6 502935-80-0 502935-88-8 502935-91-3
RL: TEM (Technical or engineered material use); USES (Uses)
(spectral sensitizer; high sensitivity AgBrI material for space
photog.)
IT 2654-52-6 14933-76-7
RL: TEM (Technical or engineered material use); USES (Uses)
(stabilizer; high sensitivity AgBrI material for space photog.)

=> s (optical or laser or information) and l6

852210 OPTICAL
19 OPTICALS
852218 OPTICAL
(OPTICAL OR OPTICALS)
507725 LASER
158383 LASERS
520833 LASER
(LASER OR LASERS)
390727 INFORMATION
2981 INFORMATIONS
393115 INFORMATION
(INFORMATION OR INFORMATIONS)
L8 322 (OPTICAL OR LASER OR INFORMATION) AND L6

=> s l8 and ((optical or laser or information) (5a) (med? or disk or disc or card))

852210 OPTICAL
19 OPTICALS
852218 OPTICAL
(OPTICAL OR OPTICALS)
507725 LASER
158383 LASERS
520833 LASER
(LASER OR LASERS)
390727 INFORMATION
2981 INFORMATIONS
393115 INFORMATION
(INFORMATION OR INFORMATIONS)
1841864 MED?
117403 DISK
58037 DISKS
147249 DISK
(DISK OR DISKS)
15130 DISC
3298 DISCS
17929 DISC
(DISC OR DISCS)
9230 CARD
5878 CARDS
12195 CARD
(CARD OR CARDS)
45433 (OPTICAL OR LASER OR INFORMATION) (5A) (MED? OR DISK OR DISC OR
CARD)
L9 25 L8 AND ((OPTICAL OR LASER OR INFORMATION) (5A) (MED? OR DISK OR
DISC OR CARD))

=> d all 1-25

L9 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:155469 CAPLUS
DN 142:249094
ED Entered STN: 24 Feb 2005
TI Hologram recording material composition, hologram recording material and
hologram recording method
IN Takizawa, Hiroo; Inoue, Noriko; Akiba, Masaharu
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 84 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM G03F007-00
CC 74-8 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1508833	A2	20050223	EP 2004-19952	20040823
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	JP 2005099751	A2	20050414	JP 2004-238077	20040818
PRAI	JP 2003-298936	A	20030822		
	JP 2003-300059	A	20030825		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1508833	ICM	G03F007-00
EP 1508833	ECLA	G03F007/00B3; G03H001/02
JP 2005099751	FTERM	2H049/CA30; 2K008/AA04; 2K008/BB06; 2K008/CC01; 2K008/DD12; 2K008/FF08; 2K008/FF17; 5D090/BB16; 5D090/CC01; 5D090/CC14; 5D090/DD01; 5D090/FF14; 5D090/KK09; 5D090/KK12; 5D090/KK15

AB To provide a compn. for a hologram recording material, a hologram
recording material and a hologram recording method applicable to a high d.
optical recording ***medium***, a three-dimensional display, a
holog. ***optical*** element etc. and capable of attaining a high
sensitivity, a high diffraction efficiency, a satisfactory storage
property, a low shrinkage rate, a dry process, a multiplex recording
property and a high recording d. An un-rewritable hologram recording
method including a step in which a sensitizing dye absorbs light by an
exposure to form an excited state, a chem. reaction step including a color
forming reaction involving an electron transfer or an energy transfer from
such excited state, and a hologram-forming step by such chem. reaction.
ST holog recording material compn sensitizing dye
IT Dyes

Holographic recording materials
(hologram recording material compn. and hologram recording method)
IT 92-84-2, Phenothiazine
RL: TEM (Technical or engineered material use); USES (Uses)
(electron donating compd.; hologram recording material compn. and
hologram recording method contg.)
IT 102-54-5, Ferrocene ***905-96-4*** ***1054-00-8*** 1291-47-0
60804-74-2 60804-75-3 ***816453-45-9***
RL: TEM (Technical or engineered material use); USES (Uses)
(sensitizing dye; hologram recording material compn. and hologram
recording method contg.)

L9 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:118427 CAPLUS
DN 142:207706
ED Entered STN: 10 Feb 2005
TI Two-photon-absorption foaming materials and three-dimensional
photorefractive or ***optical*** recording ***media*** therewith
IN Takizawa, Hiroo
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 56 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03C001-54
ICS G11B007-24

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005037658	A2	20050210	JP 2003-274096	20030714
PRAI	JP 2003-274096		20030714		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2005037658	ICM	G03C001-54
	ICS	G11B007-24
JP 2005037658	FTERM	2H123/AD24; 2H123/AD30; 2H123/FA00; 2H123/FA18; 5D029/JA04; 5D029/JB11

AB Materials including two-photon-absorbing compds. (e.g., methine dyes, phthalocyanine dyes) and thereby leading gas-bubble formation are claimed. The gas bubbles may be of 50 nm-5 .mu.m dimension. The materials may further contain blowing agents. Photorefractive recording materials contg. the above, exhibiting extremely high spatial resoln., are also claimed.

ST foaming material two photon absorption photorefractive recording; spatial resoln two photon absorption dye recording; methine phthalocyanine two photon absorbing dye ***optical*** recording

IT Two-photon absorption
 (nonresonant; two-photon-absorption foaming materials for 3D photorefractive recording media with high spatial resoln.)

IT ***Optical*** recording materials
 (photorefractive; two-photon-absorption foaming materials for 3D photorefractive recording media with high spatial resoln.)

IT Cyanine dyes
 (two-photon-absorbing; two-photon-absorption foaming materials for 3D photorefractive recording media with high spatial resoln.)

IT Blowing agents
 Photorefractive materials
 (two-photon-absorption foaming materials for 3D photorefractive recording media with high spatial resoln.)

IT 779-19-1
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (blowing agents; two-photon-absorption foaming materials for 3D photorefractive recording media with high spatial resoln.)

IT 9011-53-4P, Butyl methacrylate-isobutyl methacrylate copolymer
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (cellular; two-photon-absorption foaming materials for 3D photorefractive recording media with high spatial resoln.)

IT 574-93-6D, Phthalocyanine, derivs.
 RL: TEM (Technical or engineered material use); USES (Uses)
 (dyes, two-photon-absorbing; two-photon-absorption foaming materials for 3D photorefractive recording media with high spatial resoln.)

IT 75-28-5, Isobutane 124-38-9, Carbon dioxide, formation (nonpreparative)
 7446-09-5, Sulfur dioxide, formation (nonpreparative) 7446-11-9, Sulfur trioxide, formation (nonpreparative) 7727-37-9, Nitrogen, formation (nonpreparative) 7782-44-7, Oxygen, formation (nonpreparative)
 10102-44-0, Nitrogen dioxide, formation (nonpreparative)

RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
 (emission gases; two-photon-absorption foaming materials for 3D photorefractive recording media with high spatial resoln.)

IT 54443-93-5P 66142-15-2P 88253-66-1P 88340-89-0P 681836-46-4P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediates; two-photon-absorption foaming materials for 3D photorefractive recording media with high spatial resoln.)

IT ***33628-03-4*** 78902-42-8 681836-47-5 718636-60-3 774216-84-1
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(two-photon-absorbing dyes; two-photon-absorption foaming materials for 3D photorefractive recording media with high spatial resoln.)

IT 77-32-7 115-80-0, Triethyl orthopropionate 120-92-3, Cyclopentanone
 769-42-6, N,N-Dimethylbarbituric acid 927-63-9 1120-71-4, Propane sultone 4485-89-6 4637-24-5 5608-83-3 61931-68-8 165547-54-6

398522-14-0 839708-66-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(two-photon-absorption foaming materials for 3D photorefractive recording media with high spatial resolu.)

IT 767248-59-9

RL: TEM (Technical or engineered material use); USES (Uses)

(two-photon-absorption foaming materials for 3D photorefractive recording media with high spatial resolu.)

L9 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:98040 CAPLUS

DN 142:200024

ED Entered STN: 04 Feb 2005

TI Nonresonant multiphoton-absorbing materials

IN Takizawa, Hiroo; Akiba, Masaharu

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 56 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09B023-00

ICS C09B047-20; C09K011-06; G02F001-361; G03F007-004; C07D209-14;

C07D213-06; C07D239-62; C07D263-56; C07D277-64; C07D403-06

CC 41-6 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005029726	A2	20050203	JP 2003-272370	20030709
PRAI JP 2003-272370		20030709		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2005029726	ICM	C09B023-00
	ICS	C09B047-20; C09K011-06; G02F001-361; G03F007-004; C07D209-14; C07D213-06; C07D239-62; C07D263-56; C07D277-64; C07D403-06
JP 2005029726	FTERM	2H025/AA01; 2H025/AD01; 2H025/BC13; 2H025/CA41; 2K002/AA07; 2K002/BA01; 2K002/CA06; 2K002/GA07; 2K002/HA22; 4C055/AA01; 4C055/BA01; 4C055/CA01; 4C055/DA01; 4C055/GA01; 4C056/AA01; 4C056/AB01; 4C056/AC02; 4C056/AD03; 4C056/AE02; 4C056/CA09; 4C056/CC03; 4C056/CD02; 4C063/AA01; 4C063/BB03; 4C063/CC29; 4C063/DD06; 4C063/EE10; 4C204/BB05; 4C204/BB09; 4C204/CB03; 4C204/DB03; 4C204/DB13; 4C204/EB10; 4C204/FB03; 4C204/GB01; 4H056/CA01; 4H056/CA02; 4H056/CA05; 4H056/CB01; 4H056/CC08; 4H056/CE03; 4H056/CE06; 4H056/DD03; 4H056/DD07; 4H056/DD19; 4H056/DD23; 4H056/DD29; 4H056/FA05

GI

/ Structure 4 in file .gra /

AB The materials, useful for stereophotolithog., 3-dimensional displays, 3-dimensional ***optical*** recording ***media***, etc., contain dyes showing sensitization or luminescence via nonresonant multiphoton absorption with high efficiency. Thus, a photoresponsive compn. comprising Bu methacrylate-iso-Bu methacrylate copolymer 100, 2-photon absorbent I 0.5, Ph2I+BF4- 3.0, and crystal violet lactone 3.0 parts was irradiated with 820 nm ***laser*** pulses to result in cyan color development.

ST nonresonant multiphoton absorber dye sensitizer stereophotolithog; luminescent dye nonresonant multiphoton absorber display; ***optical*** recording nonresonant multiphoton absorber dye

IT Luminescent substances

(dyes; prepn. of sensitizing or luminescent dyes showing nonresonant multiphoton absorption with high efficiency)

IT Dyes

(luminescent; prepn. of sensitizing or luminescent dyes showing nonresonant multiphoton absorption with high efficiency)

IT Multiphoton absorption
(prepn. of sensitizing or luminescent dyes showing nonresonant multiphoton absorption with high efficiency)

IT ,Photolithography
Stereolithography
(stereophotolithog.; prepn. of sensitizing or luminescent dyes showing nonresonant multiphoton absorption with high efficiency)

IT ***Optical*** imaging devices
Optical recording materials
(three-dimensional; prepn. of sensitizing or luminescent dyes showing nonresonant multiphoton absorption with high efficiency)

IT 54443-93-5P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of sensitizing or luminescent dyes showing nonresonant multiphoton absorption with high efficiency)

IT 500905-67-9
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(prepn. of sensitizing or luminescent dyes showing nonresonant multiphoton absorption with high efficiency)

IT 9011-53-4, Butyl methacrylate-isobutyl methacrylate copolymer
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(prepn. of sensitizing or luminescent dyes showing nonresonant multiphoton absorption with high efficiency)

IT ***33628-03-4P*** 54444-01-8P 681836-47-5P 718636-60-3P 774216-84-1P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of sensitizing or luminescent dyes showing nonresonant multiphoton absorption with high efficiency)

IT 7440-02-0D, Nickel, complexes with azo compds. 28272-54-0 32976-69-5
40387-89-1 72076-49-4 101186-34-9 111545-69-8 183272-14-2
308116-42-9 553654-82-3 553654-83-4 680232-65-9 680232-68-2
680232-71-7 680232-73-9 680232-75-1 680232-77-3 680232-79-5
680232-80-8 680232-81-9 680232-85-3 718636-58-9 718636-62-5
718636-63-6 752253-83-1 797049-88-8D, Nickel complexes 809233-25-8
816453-41-5 816453-43-7 831218-03-2 831218-06-5 835621-22-2
835628-33-6 835628-34-7
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(prepn. of sensitizing or luminescent dyes showing nonresonant multiphoton absorption with high efficiency)

IT 115-80-0, Triethyl orthopropionate 120-92-3, Cyclopentanone 927-63-9
1120-71-4, Propane sultone 1497-49-0 4485-89-6 4637-24-5,
Dimethylformamide dimethyl acetal 5217-47-0 29636-96-2 32479-73-5
61931-68-8 165547-54-6 398522-14-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of sensitizing or luminescent dyes showing nonresonant multiphoton absorption with high efficiency)

IT 66142-15-2P 88253-66-1P 88340-89-0P 681836-46-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of sensitizing or luminescent dyes showing nonresonant multiphoton absorption with high efficiency)

L9 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:78070 CAPLUS

DN 142:136586

ED Entered STN: 28 Jan 2005

TI Two-photon absorption dye-containing material, three-dimensional refractive index modulation material, three-dimensional absorption index modulation material and three-dimensional ***optical*** recording material

IN Takizawa, Hiroo

PA Fuji Photo Film Co., Ltd., Japan

SO U.S. Pat. Appl. Publ., 66 pp.

CODEN: USXXCO

DT Patent

LA English

IC ICM C09B035-00

ICS G01J001-58
 INCL 430561000; 534726000
 CC 41-8 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
 Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005019711	A1	20050127	US 2004-892306	20040716
	JP 2005055875	A2	20050303	JP 2004-199005	20040706
PRAI	JP 2003-276684	A	20030718		
	JP 2004-199005	A	20040706		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2005019711	ICM	C09B035-00
	ICS	G01J001-58
	INCL	430561000; 534726000
US 2005019711	NCL	430/561.000
JP 2005055875	FTERM	2H123/AD00; 2H123/AD02; 2K002/AA05; 2K002/CA05; 2K002/HA13; 4H056/CA01; 4H056/CA02; 4H056/CA05; 4H056/CB01; 4H056/CC02; 4H056/CC08; 4H056/CE03; 4H056/DD03; 4H056/DD07; 4H056/DD19; 4H056/DD23; 4H056/DD28; 4H056/DD29; 4H056/FA06; 4H056/FA10; 5D029/JA04; 5D029/JB11; 5D029/JC03; 5D029/JC04

OS MARPAT 142:136586

AB The two-photon absorption dye-contg. material comprises at least a two-photon absorption dye capable of decoloring itself through two-photon absorption. The material further comprises a decoloring agent precursor. The material is useful for a three-dimensional refractive index or absorption index modulation material, and a three-dimensional ***optical*** recording ***medium***. Thus, a two-photon absorption dye-contg. material was prepd. from 5-chloro-2-[5-(5-chloro-3-ethyl-2(3H)-benzoxazolylidene)-1,3-pentadienyl]-3-ethylbenzoxazolium iodide (two-photon absorption dye) 17 parts, di-Ph iodonium hexafluorophosphate (decoloring agent precursor) 28 parts, polymethyl methacrylate (binder) 55 parts, and chloroform (solvent) 300 parts.

ST two photon absorption dye refractive index modulation ***optical*** recording

IT Decolorizing agents
 Optical recording
 Photochromic materials
 Two-photon absorption
 (two-photon absorption dye-contg. material for three-dimensional refractive index modulation material and ***optical*** recording material)

IT 9011-14-7, Polymethyl methacrylate
 RL: TEM (Technical or engineered material use); USES (Uses)
 (binder; two-photon absorption dye-contg. material for three-dimensional refractive index modulation material and ***optical*** recording material)

IT 58109-40-3, Diphenyl iodonium hexafluorophosphate
 RL: TEM (Technical or engineered material use); USES (Uses)
 (decoloring agent precursor; two-photon absorption dye-contg. material for three-dimensional refractive index modulation material and ***optical*** recording material)

IT 54443-93-5P 66142-15-2P 88253-66-1P 88340-89-0P 681836-46-4P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; two-photon absorption dye-contg. material for three-dimensional refractive index modulation material and ***optical*** recording material)

IT 115-80-0, Triethyl orthopropionate 120-92-3, Cyclopentanone 769-42-6 927-63-9 1120-71-4, Propanesultone 1497-49-0 4485-89-6 4637-24-5 5217-47-0 29636-96-2 61931-68-8 165547-54-6 398522-14-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (starting material; two-photon absorption dye-contg. material for three-dimensional refractive index modulation material and ***optical*** recording material)

IT ***33628-03-4P*** 78902-42-8P 681836-47-5P 718636-60-3P 774216-84-1P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material

use); PREP (Preparation); USES (Uses)
(two-photon absorption dye; two-photon absorption dye-contg. material
for three-dimensional refractive index modulation material and
optical recording material)

IT 111545-69-8

RL: TEM (Technical or engineered material use); USES (Uses)
(two-photon absorption dye; two-photon absorption dye-contg. material
for three-dimensional refractive index modulation material and
optical recording material)

L9 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:1154428 CAPLUS

DN 142:103253

ED Entered STN: 30 Dec 2004

TI Two-photon absorbing ***optical*** recording material and method

IN Akiba, Masaharu; Tani, Takeharu; Takizawa, Hiroo; Inagaki, Yoshio

PA Fuji Photo Film Co., Ltd., Japan

SO Eur. Pat. Appl., 139 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM G11B007-00

ICS G11B007-24

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1492092	A2	20041229	EP 2004-14963	20040625
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	JP 2005015699	A2	20050120	JP 2003-184932	20030627
	US 2005003133	A1	20050106	US 2004-874344	20040624
	JP 2005071570	A2	20050317	JP 2004-199003	20040706
	JP 2005100599	A2	20050414	JP 2004-199004	20040706
PRAI	JP 2003-184932	A	20030627		
	JP 2003-284959	A	20030801		
	JP 2003-300058	A	20030825		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1492092	ICM	G11B007-00
	ICS	G11B007-24
EP 1492092	ECLA	G11B007/246; G11B007/247; G11B007/248; G11B007/249
JP 2005015699	FTERM	4J002/AB021; 4J002/AB031; 4J002/AC071; 4J002/AC121; 4J002/BB061; 4J002/BC031; 4J002/BC051; 4J002/BD041; 4J002/BD051; 4J002/BD101; 4J002/BD131; 4J002/BD141; 4J002/BD151; 4J002/BE021; 4J002/BE061; 4J002/BF021; 4J002/BG041; 4J002/BG051; 4J002/BG101; 4J002/BK001; 4J002/BL011; 4J002/BL021; 4J002/BN151; 4J002/BQ001; 4J002/CD201; 4J002/CG001; 4J002/CH021; 4J002/CK021; 4J002/CL001; 4J002/EB007; 4J002/EE056; 4J002/EL066; 4J002/EL086; 4J002/EL106; 4J002/EN076; 4J002/EP018; 4J002/EQ016; 4J002/EQ017; 4J002/ET006; 4J002/EU026; 4J002/EU028; 4J002/EU036; 4J002/EU038; 4J002/EU106; 4J002/EU136; 4J002/EU206; 4J002/EU216; 4J002/EU238; 4J002/EV256; 4J002/EV297; 4J002/EV306; 4J002/EV316; 4J002/EZ006; 4J002/FD096; 4J002/FD098; 4J002/FD207; 4J002/FD208
US 2005003133	NCL	428/064.200
	ECLA	G11B007/246; G11B007/247; G11B007/248; G11B007/249
JP 2005071570	FTERM	2H123/AD00; 2H123/AD12; 2H123/AD13; 2H123/AD14; 2H123/AD16; 2H123/AD30; 2H123/AE00; 2H123/AE01; 2H123/CA00; 2H123/CA22; 2H123/EA00; 2H123/EA08; 4H056/CA01; 4H056/CA02; 4H056/CA04; 4H056/CA05; 4H056/CB06; 4H056/CC08; 4H056/CE01; 4H056/CE03; 4H056/DD03; 4H056/DD04; 4H056/DD06; 4H056/DD15; 4H056/EA14; 4H056/FA05; 5D029/JA04; 5D029/JB11; 5D029/JB47; 5D029/JC02; 5D029/JC03; 5D029/JC04; 5D029/VA01; 5D029/VA10; 5D090/AA01; 5D090/BB03; 5D090/BB16; 5D090/CC12; 5D090/CC14; 5D090/DD01
JP 2005100599	FTERM	2H123/AD00; 2H123/AD12; 2H123/AE00; 2H123/AE01;

OS MARPAT 142:103253
AB A two-photon absorbing ***optical*** recording material comprising at least one two-photon absorbing compd. and a recording component is provided. Recording is made on it by utilizing the two-photon absorption of the two-photon absorbing compd. in the material, and then the material is irradiated with light to thereby detect the difference in the reflectance between the recorded area and the unrecorded area thereof, and the recorded ***information*** is thereby reproduced from the material, and also provided are a photosensitive polymer compn. and a photon-mode recording method for the material. The object of the present invention is to provide a high-sensitivity two-photon absorbing three-dimensional ***optical*** recording material and a two-photon absorbing three-dimensional recording and reproducing method, in which the recording material contains at least a two-photon absorbing compd. having a large cross-sectional area for two-photon absorption, and, after ***information*** is recorded on the recording material by utilizing the two-photon absorption of the two-photon absorbing compd., the recording material is irradiated with light so as to detect difference of the reflectance or transmittance for ***information*** reprodn. from the material.

ST two photon absorption ***optical*** recording material ***disk***
IT ***Optical*** ***disks***
Two-photon absorption
(two-photon absorbing ***optical*** recording material and method)

IT 54443-93-5P 66142-15-2P 88340-89-0P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of two-photon absorbing compd.)

IT 115-80-0 769-42-6 1120-71-4 4485-89-6 4637-24-5 5217-47-0
5608-83-3 29636-96-2 61931-68-8 134957-47-4 398522-14-0
816453-38-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of two-photon absorbing compd.)

IT 120-92-3P, Cyclopentanone 927-63-9P 88253-66-1P 681836-46-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of two-photon absorbing compd.)

IT ***33628-03-4P*** 78902-42-8P 500905-67-9P 718636-60-3P
774216-84-1P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(two-photon absorbing ***optical*** recording material and method)

IT 681836-47-5P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(two-photon absorbing ***optical*** recording material and method)

IT 518-44-5 1207-72-3 14591-65-2 18371-32-9 30435-66-6 58109-40-3
72076-49-4 76850-82-3 114750-15-1 133795-11-6 133795-12-7
168697-84-5 169309-12-0 181885-13-2 188305-03-5 308116-42-9
452072-54-7 680232-71-7 680232-73-9 718636-63-6 809233-25-8
816453-39-1 816453-41-5 816453-43-7 ***816453-44-8***
816453-45-9 816453-46-0 816453-47-1 816453-48-2
816453-49-3 816453-50-6 816453-51-7 816453-52-8 816453-53-9
816453-54-0 816453-55-1 816453-56-2 816453-57-3 816453-58-4
816453-59-5 816453-60-8 816453-61-9 816453-62-0 816453-63-1
816453-64-2 816453-65-3 816453-66-4 816453-67-5 816453-68-6
816453-69-7 816453-70-0 816453-71-1 816453-72-2 816453-73-3
816453-74-4 816453-75-5 816453-76-6 816453-77-7 816453-78-8
816453-79-9
RL: TEM (Technical or engineered material use); USES (Uses)
(two-photon absorbing ***optical*** recording material and method)

L9 ANSWER 6 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:305221 CAPLUS
DN 140:347135
ED Entered STN: 15 Apr 2004
TI Nonresonant two-photon-absorbing material, nonresonant two-photon-emitting material, and methods for inducing absorption or generating nonresonant two-photon emission by using the material
IN Takizawa, Hiroo; Tani, Takeharu; Morinaga, Naoki

PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 46 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM G02F001-361
ICS G03F007-00
CC 73-10 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 41, 74

FAN.CNT 1					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	EP 1408366	A2	20040414	EP 2003-22697	20031007
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2004279794	A2	20041007	JP 2003-71874	20030317
	JP 2004279795	A2	20041007	JP 2003-71875	20030317
	JP 2004149517	A2	20040527	JP 2003-337029	20030929
	US 2004086803	A1	20040506	US 2003-678301	20031006
	JP 2005025152	A2	20050127	JP 2003-351665	20031010
PRAI	JP 2002-293720	A	20021007		
	JP 2003-65580	A	20030311		
	JP 2003-71874	A	20030317		
	JP 2003-71875	A	20030317		
	JP 2003-168028	A	20030612		

CLASS			
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
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EP 1408366	ICM	G02F001-361	
	ICS	G03F007-00	
EP 1408366	ECLA	G02F001/361B2; G02F001/361D2; G03F007/00S; G03F007/20S2	
JP 2004279794	FTERM	2K002/AB12; 2K002/BA01; 2K002/CA05; 2K002/GA07; 2K002/HA13; 4H056/CA01; 4H056/CC02; 4H056/CC04; 4H056/CC08; 4H056/CD04; 4H056/CD08; 4H056/CD09; 4H056/CE01; 4H056/CE03; 4H056/CE06; 4H056/DD06; 4H056/DD07; 4H056/DD12; 4H056/DD16; 4H056/DD19; 4H056/DD23; 4H056/DD28; 4H056/DD29	
JP 2004279795	FTERM	2K002/AB12; 2K002/BA01; 2K002/CA06; 2K002/HA19; 4H056/CA02; 4H056/CC04; 4H056/CC08; 4H056/CD08; 4H056/CD09; 4H056/CD12; 4H056/CE01; 4H056/CE03; 4H056/CE06; 4H056/DD03; 4H056/DD04; 4H056/DD06; 4H056/DD07; 4H056/DD12; 4H056/DD16; 4H056/DD19; 4H056/DD23; 4H056/DD28; 4H056/DD29; 4H056/FA10	
JP 2004149517	FTERM	2K002/AB12; 2K002/BA01; 2K002/CA05; 2K002/HA13; 4C056/AA01; 4C056/AB01; 4C056/AC02; 4C056/AD03; 4C056/AE03; 4H006/AA01; 4H006/AA03; 4H006/AB92; 4H006/BJ50; 4H006/BN20; 4H006/BR70; 4H006/BU42; 4H006/BU46; 4H006/BU50; 4H006/NB00; 4H048/AA01; 4H048/AA03; 4H048/AB92; 4H048/VA32; 4H048/VA56; 4H048/VA60; 4H048/VA66; 4H048/VB10	
US 2004086803	NCL	430/270.180	
	ECLA	G02F001/361B2; G02F001/361D2; G03F007/00S; G03F007/20S2	
JP 2005025152	FTERM	2K002/AA07; 2K002/AB29; 2K002/BA01; 2K002/CA06; 2K002/GA07; 2K002/HA22; 4H056/CA01; 4H056/CA05; 4H056/CC02; 4H056/CC08; 4H056/CE03; 4H056/CE06; 4H056/DD03; 4H056/DD04; 4H056/DD06; 4H056/DD07; 4H056/DD15; 4H056/DD19	

OS MARPAT 140:347135
AB Nonresonant two-photon-absorbing materials are described which comprise a methine dye or a dye in an intramol. aggregation state. The methine dye is preferably a cyanine dye, a merocyanine dye, or an oxonol dye. Two-photon-emitting materials are also described which the two-photon-absorbing materials. Methods for inducing two-photon absorption and/or emission entailing irradiating the materials with ***laser*** radiation are also described. ***Optical*** recording ***media***, three-dimensional vol. displays, and three-dimensional stereolithog. are also described which employ the materials.
ST nonresonant two photon absorbing emitting material; ***optical*** recording ***medium*** nonresonant two photon absorbing emitting material; three dimensional display two photon absorbing emitting material; stereolithog two photon absorbing emitting material

IT Cyanine dyes
Dyes
Luminescent substances
Nonlinear ***optical*** materials
Two-photon absorption
(nonresonant two-photon-absorbing and -emitting materials and methods
for inducing absorption or generating nonresonant two-photon emission
using them and their use)

IT ***Optical*** recording materials
Stereolithography
(nonresonant two-photon-absorbing and -emitting materials and methods
for inducing absorption or generating nonresonant two-photon emission
using them and their use in)

IT ***Optical*** imaging devices
(three-dimensional; nonresonant two-photon-absorbing and -emitting
materials and methods for inducing absorption or generating nonresonant
two-photon emission using them and their use in)

IT 67-52-7, Barbituric acid 115-80-0, Triethyl orthopropionate 273-53-0,
Benzoxazole 504-17-6, Thiobarbituric acid 1120-71-4, Propane sultone
4485-89-6 5608-83-3 29636-96-2 680232-64-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(nonresonant two-photon-absorbing and -emitting materials and methods
for inducing absorption or generating nonresonant two-photon emission
using them and their use)

IT 54443-93-5P 66142-15-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(nonresonant two-photon-absorbing and -emitting materials and methods
for inducing absorption or generating nonresonant two-photon emission
using them and their use)

IT ***33628-03-4P*** 78902-42-8P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(nonresonant two-photon-absorbing and -emitting materials and methods
for inducing absorption or generating nonresonant two-photon emission
using them and their use)

IT 14846-12-9 32976-69-5 40387-89-1 55935-20-1 65294-02-2
72076-49-4 102731-88-4 111545-69-8 115310-99-1 183272-14-2
308116-42-9 308116-44-1 337963-09-4 455329-63-2 680232-65-9
680232-66-0 680232-68-2 680232-69-3 680232-71-7 680232-73-9
680232-75-1 680232-77-3 680232-78-4 680232-79-5 680232-80-8
680232-81-9 ***680232-83-1*** 680232-84-2 680232-85-3
680232-87-5 680232-89-7 680232-90-0 680232-91-1 680232-92-2
680232-94-4 680232-95-5 680232-96-6 680233-01-6 680233-02-7
RL: TEM (Technical or engineered material use); USES (Uses)
(nonresonant two-photon-absorbing and -emitting materials and methods
for inducing absorption or generating nonresonant two-photon emission
using them and their use)

L9 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:252077 CAPLUS

DN 140:294870

ED Entered STN: 26 Mar 2004

TI ***Optical*** recording ***medium*** and ***optical***
recording/reproducing method

IN Fukuzawa, Narutoshi; Horai, Takashi; Take, Hiroshi

PA Tdk Corporation, Japan

SO U.S. Pat. Appl. Publ., 11 pp.

CODEN: USXXCO

DT Patent

LA English

IC ICM G11B007-24

INCL 430270110

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004058274	A1	20040325	US 2003-657205	20030909
	JP 2004098542	A2	20040402	JP 2002-264973	20020911
PRAI	JP 2002-264973	A	20020911		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004058274	ICM	G11B007-24
	INCL	430270110
US 2004058274	NCL	430/270.110
JP 2004098542	FTERM	2H111/EA03; 2H111/EA12; 2H111/EA22; 2H111/EA32; 2H111/EA43; 2H111/EA48; 2H111/FA14; 2H111/FA30; 2H111/FB43; 2H111/FB63; 4H056/CA01; 4H056/CC02; 4H056/CC08; 4H056/CE03; 4H056/CE06; 4H056/DD03; 4H056/DD06; 4H056/DD19; 4H056/DD23; 4H056/FA06; 5D029/JA04; 5D029/JB28; 5D029/JB47; 5D029/JC05; 5D029/JC06; 5D090/AA01; 5D090/BB03; 5D090/CC01; 5D090/CC04; 5D090/DD02; 5D090/FF11; 5D090/KK06
AB	<p>The present invention provides an ***optical*** recording ***medium*** that includes a recording layer composed mainly of an org. compd. and can utilize blue-violet semiconductor ***laser*** light (390 to 420 nm in wavelength) as recording/reproducing ***laser*** light. The present invention also provides an ***optical*** recording/reproducing method using the ***optical*** recording ***medium***. The ***optical*** recording ***medium*** comprises at least a supporting substrate; a recording layer on the supporting substrate, the recording layer contg. an org. compd. as a major component; and a light-transmitting layer on the recording layer, the light-transmitting layer being capable of transmitting ***laser*** light with a wavelength of 390 to 420 nm for recording and reproducing ***information***. The org. compd. in the recording layer includes a trimethine cyanine dye that has the min. value n min of its refractive index n (real part of the complex refractive index) within the range of 370 to 425 nm and has a refractive index n of 1.2 or lower with respect to the wavelength of the recording/reproducing ***laser*** light. The org. compd., when absorbing the ***laser*** light, melts or degrades to bring about a change in the refractive index, thereby effecting recording of the ***information***.</p>	
ST	***optical*** recording ***medium*** reproducing	
IT	***Optical*** recording materials (erasable; ***optical*** recording ***medium*** and ***optical*** recording/reproducing method)	
IT	***Optical*** ***disks*** (***optical*** recording ***medium*** and ***optical*** recording/reproducing method)	
IT	Cyanine dyes (***optical*** recording ***medium*** and ***optical*** recording/reproducing method contg.)	
IT	***905-96-4*** 3065-71-2 ***53213-80-2*** 675818-75-4 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses) (trimethine cyanine dye; ***optical*** recording ***medium*** and ***optical*** recording/reproducing method contg.)	
L9	ANSWER 8 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN	
AN	2003:685872 CAPLUS	
DN	139:221678	
ED	Entered STN: 03 Sep 2003	
TI	***Optical*** recording material containing dye salt from cyanine dye cation and azo-metal chelate anion	
IN	Ueno, Yasunobu; Sato, Tsutomu; Tomura, Tatsuya; Noguchi, Shu	
PA	Ricoh Co., Ltd., Japan	
SO	Jpn. Kokai Tokkyo Koho, 18 pp. CODEN: JKXXAF	
DT	Patent	
LA	Japanese	
IC	ICM B41M005-26 ICS G11B007-24; C09B023-00; C09B045-44	
CC	74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 41	
FAN.CNT 1		
	PATENT NO.	KIND DATE APPLICATION NO. DATE
PI	JP 2003246149	A2 20030902 JP 2002-50403 20020226
PRAI	JP 2002-50403	20020226
CLASS		

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2003246149	ICM	B41M005-26
	ICS	G11B007-24; C09B023-00; C09B045-44
OS MARPAT 139:221678		
GI		

/ Structure 5 in file .gra /

AB The material comprises a support coated with a recording layer contg. a dye salt of a cyanine dye cation I [A, B = arom. ring; R9-10 = (un)substituted alkyl] and an azo-metal chelate anion from an azo compd. II [R1-8 = H, halo, nitro, cyano, OH, carboxy, amino, alkyl, aryl, alkylcarbonyl, arylcarbonyl, alkylloxycarbonyl, aryloxycarbonyl, alkylsulfonyl, arylsulfonyl, alkylthio, arylthio, alkylthioxy, arylthioxy, alkyloxy, aryloxy, alkylamino, arylamino, alkylcarbonylamino, arylcarbonylamino, alkylcarbamoyle, arylcarbamoyle, alkenyl, alkylsulfinio, alkylaminosulfinio, sulfo, these groups may be substituted; X = active H], and metal, metal oxide, or metal salt. The material shows good lightfastness and storage stability and is useful for DVD-R ***disk*** system using shorter ***laser*** beam.

ST ***optical*** recording material; salt cyanine dye cation azo metal chelate

IT ***Optical*** recording materials
(***optical*** recording material contg. dye salt from cyanine dye cation and azo-metal chelate anion)

IT 13963-57-0D, Aluminum acetylacetonate, reaction products azo dye, salts with cyanine dye 14024-18-1D, Iron acetylacetonate, reaction products azo dye, salts with cyanine dye 14284-89-0D, Manganese acetylacetonate, reaction products azo dye, salts with cyanine dye 14284-92-5D, Rhodium acetylacetonate, reaction products azo dye, salts with cyanine dye 15653-01-7D, Cerium acetylacetonate, reaction products azo dye, salts with cyanine dye 18403-49-1D, salts with azo-metal chelate anion 18466-01-8D, salts with azo-metal chelate anion 20187-38-6D, salts with azo-metal chelate anion 21679-31-2D, Chromium acetylacetonate, reaction products azo dye, salts with cyanine dye 21679-46-9D, Cobalt acetylacetonate, reaction products azo dye, salts with cyanine dye ***37069-75-3D***, salts with azo-metal chelate anion 46824-14-0D, salts with azo-metal chelate anion 124710-31-2D, salts with azo-metal chelate anion 586390-36-5D, salts with azo-metal chelate anion 587878-51-1D, reaction products with metal compd., salts with cyanine dye 587878-52-2D, salts with azo-metal chelate anion 610311-36-9D, reaction products with metal compd., salts with cyanine dye 610311-37-0D, reaction products with metal compd., salts with cyanine dye 610311-38-1D, reaction products with metal compd., salts with cyanine dye 610311-39-2D, reaction products with metal compd., salts with cyanine dye 610311-40-5D, reaction products with metal compd., salts with cyanine dye RL: DEV (Device component use); USES (Uses)
(***optical*** recording material contg. dye salt from cyanine dye cation and azo-metal chelate anion)

IT 587878-45-3DP, reaction products with metal compd., salts with cyanine dye RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(***optical*** recording material contg. dye salt from cyanine dye cation and azo-metal chelate anion)

L9 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:977741 CAPLUS

DN 138:63909

ED Entered STN: 29 Dec 2002

TI Write-once ***optical*** recording ***medium*** suitable for 380-450 nm ***laser***

IN Oyamada, Mitsuaki; Iwamada, Takashi; Tamura, Shinichiro

PA Sony Corporation, Japan

SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM B41M005-26
ICS G11B007-24; G11B007-004; C09B023-06

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002102598	A1	20021227	WO 2002-JP6081	20020618
	W: CA, CN, JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				

PRAI JP 2001-183812 A 20010618

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002102598	ICM	B41M005-26
	ICS	G11B007-24; G11B007-004; C09B023-06
WO 2002102598	ECLA	G11B007/244; G11B007/247

OS MARPAT 138:63909

AB A recording layer having a film-forming layer contg. at least an org. dye (preferably a cyanine dye), a dielec. layer, and a light-transmitting protective film are formed on a substrate having a recess. The org. dye contained in the recording layer has an absorption spectrum having an absorption peak of a wavelength .lambda.max the relation of which with the wavelength .lambda. of a ***laser*** beam used for recording and reproducing is .lambda.max > .lambda.. Thus a write-once ***optical*** recording ***medium*** for recording and reproducing adapted for using a ***laser*** beam of wavelength of 380 to 450 nm is provided.

ST ***optical*** recording ***medium*** write once ***disk*** cyanine dye

IT Erasable ***optical*** ***disks***
(write-once ***optical*** recording ***medium*** with cyanine dye for recording-readout by 380-450 nm ***laser***)

IT ***53213-80-2*** 186818-79-1 215371-22-5
RL: DEV (Device component use); USES (Uses)
(cyanine dye; write-once ***optical*** recording ***medium*** with cyanine dye for recording-readout by 380-450 nm ***laser***)

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Asahi Denka Kogyo Kabushiki Kaisha; JP 10-168450 A 1998 CAPLUS
- (2) Eastman Kodak Co; JP 200036129 A 1999
- (3) Eastman Kodak Co; EP 961266 A2 1999 CAPLUS
- (4) Fuji Photo Film Co Ltd; JP 10-324065 A 1998 CAPLUS
- (5) Fuji Photo Film Co Ltd; JP 11-353710 A 1999 CAPLUS
- (6) Fuji Photo Film Co Ltd; JP 11-58973 A 1999 CAPLUS
- (7) Fuji Photo Film Co Ltd; JP 2001232945 A 2001 CAPLUS
- (8) International Business Machines Corp; JP 07-201077 A 1995 CAPLUS
- (9) International Business Machines Corp; US 5449590 A 1995
- (10) Mitsubishi Chemical Corp; JP 09-193545 A 1997 CAPLUS
- (11) Mitsubishi Chemical Corp; JP 11-53758 A 1999
- (12) Mitsubishi Chemical Corp; JP 2000343824 A 2000 CAPLUS
- (13) Mitsui Chemicals Ltd; JP 10-188339 A 1998 CAPLUS
- (14) Mitsui Chemicals Ltd; JP 2000222771 A 2000 CAPLUS
- (15) Tdk Kabushiki Kaisha; JP 11-34499 A 1999 CAPLUS

L9 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:754712 CAPLUS

DN 137:286546

ED Entered STN: 04 Oct 2002

TI ***Optical*** data carrier containing xanthene dye as light-absorbing compound in the ***information*** layer, the dyes and their preparation and use

IN Berneth, Horst; Bruder, Friedrich-Karl; Haese, Wilfried; Hagen, Rainer; Hassenrueck, Karin; Kostromine, Serguei; Landenberger, Peter; Oser, Rafael; Sommermann, Thomas; Stawitz, Josef-Walter; Bieringer, Thomas

PA Bayer Aktiengesellschaft, Germany

SO PCT Int. Appl., 73 pp.

CODEN: PIXXD2

DT Patent

LA German

IC ICM G11B007-24

ICS C09B011-28; C07D311-82; C07D213-20

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 41

FAN.CNT 15

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002077984	A1	20021003	WO 2002-EP3095	20020320
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	DE 10115227	A1	20021219	DE 2001-10115227	20010328
	DE 10117462	A1	20021010	DE 2001-10117462	20010406
	DE 10136063	A1	20030213	DE 2001-10136063	20010725
	DE 10136064	A1	20030213	DE 2001-10136064	20010725
	DE 10202571	A1	20030731	DE 2002-10202571	20020124
	US 2002155381	A1	20021024	US 2002-102586	20020320
	WO 2002086878	A2	20021031	WO 2002-EP3071	20020320
	WO 2002086878	A3	20030227		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003096192	A1	20030522	US 2002-102588	20020320
	EP 1377974	A1	20040107	EP 2002-724250	20020320
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	EP 1377975	A2	20040107	EP 2002-727443	20020320
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	EP 1377978	A2	20040107	EP 2002-737887	20020320
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	CN 1515002	A	20040721	CN 2002-810906	20020320
	CN 1516872	A	20040728	CN 2002-810887	20020320
	JP 2004523395	T2	20040805	JP 2002-575938	20020320
	JP 2004524198	T2	20040812	JP 2002-584311	20020320
	TW 223252	B1	20041101	TW 2002-91105381	20020320
	JP 2004534344	T2	20041111	JP 2002-578290	20020320
	US 2005042407	A1	20050224	US 2004-953235	20040929
PRAI	DE 2001-10115227	A	20010328		
	DE 2001-10117462	A	20010406		
	DE 2001-10136063	A	20010725		
	DE 2001-10136064	A	20010725		
	DE 2002-10202571	A	20020124		
	DE 2001-10117461	A	20010406		
	DE 2001-10117463	A	20010406		
	DE 2001-10117464	A	20010406		
	DE 2001-10124585	A	20010521		
	DE 2001-10140165	A	20010822		
	EP 2001-123810	A	20011004		
	EP 2001-130527	A	20011221		
	DE 2002-10200484	A	20020109		
	EP 2002-5505	A	20020311		
	US 2002-101793	A3	20020320		
	WO 2002-EP3071	W	20020320		
	WO 2002-EP3094	W	20020320		
	WO 2002-EP3095	W	20020320		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002077984	ICM	G11B007-24

WO 2002077984	ICS ECLA	C09B011-28; C07D311-82; C07D213-20 C07D217/14; C07D221/04B; C07D311/12; C07D311/80; C07D455/04; C07D491/04+311B+221B; C07F015/06B; C09B023/00S; C09B023/04; C09B023/10B; C09B029/00H2; C09B029/00H10; C09B029/36; C09B044/10; C09B047/04B; C09B047/08B; C09B047/26; C09B069/02; C09K009/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/249; G11B007/254; G11B007/26
DE 10115227	ECLA	C07D217/14; C07D221/04B; C07D311/12; C07D311/80; C07D455/04; C07D491/04+311B+221B; C07F015/06B; C09B023/00S; C09B023/04; C09B023/10B; C09B029/00H2; C09B029/00H10; C09B029/36; C09B044/10; C09B047/04B; C09B047/08B; C09B047/26; C09K009/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/249; G11B007/254; G11B007/26
DE 10117462	ECLA	C09B069/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/254; G11B007/26
DE 10136063	ECLA	C09B069/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/254; G11B007/26
DE 10136064	ECLA	C09B044/10; C09B069/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/254; G11B007/26
DE 10202571	ECLA	C09B069/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/254; G11B007/26
US 2002155381	NCL ECLA	430/270.150 C07D217/14; C07D221/04B; C07D311/12; C07D311/80; C07D455/04; C07D491/04+311B+221B; C07F015/06B; C09B023/00S; C09B023/04; C09B023/10B; C09B029/00H2; C09B029/00H10; C09B029/36; C09B044/10; C09B047/04B; C09B047/08B; C09B047/26; C09K009/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/249; G11B007/254; G11B007/26
WO 2002086878	ECLA	C07D217/14; C07D221/04B; C07D311/12; C07D311/80; C07D455/04; C07D491/04+311B+221B; C07F015/06B; C09B023/00S; C09B023/04; C09B023/10B; C09B029/00H2; C09B029/00H10; C09B029/36; C09B044/10; C09B047/04B; C09B047/08B; C09B047/26; C09K009/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/249; G11B007/254; G11B007/26
US 2003096192	NCL ECLA	430/270.150 C07D217/14; C07D221/04B; C07D311/12; C07D311/80; C07D455/04; C07D491/04+311B+221B; C07F015/06B; C09B023/00S; C09B023/04; C09B023/10B; C09B029/00H2; C09B029/00H10; C09B029/36; C09B044/10; C09B047/04B; C09B047/08B; C09B047/26; C09B069/02; C09K009/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/249; G11B007/254; G11B007/26
JP 2004523395	FTERM	2H111/EA03; 2H111/EA12; 2H111/EA22; 2H111/EA32; 2H111/EA01; 2H111/EA12; 2H111/EA14; 2H111/EA21; 2H111/EA37; 2H111/EA42; 2H111/EA43; 2H111/EA01; 2H111/EA14; 2H111/EA15; 2H111/EA42
JP 2004524198	FTERM	2H111/EA03; 2H111/EA12; 2H111/EA22; 2H111/EA32; 2H111/EA01; 2H111/EA12; 2H111/EA14; 2H111/EA21; 2H111/EA37; 2H111/EA42; 2H111/EA43; 2H111/EA01; 2H111/EA14; 2H111/EA15; 2H111/EA21; 2H111/EA44; 2H111/EA45; 2H111/EA02; 2H111/EA03; 2H111/EA07; 4H056/CA01; 4H056/CA02; 4H056/CC05; 4H056/CC08; 4H056/CD05; 4H056/CE03; 4H056/CE07; 4H056/DD03; 4H056/DD07; 4H056/DD15; 4H056/DD19; 4H056/DD29; 5D029/JA04; 5D029/JB28; 5D029/JB46; 5D029/JB47; 5D029/LA02; 5D029/LA11; 5D029/LB07; 5D029/LB12; 5D029/LB17; 5D029/LC08; 5D121/AA01; 5D121/AA04; 5D121/EE02; 5D121/EE03; 5D121/EE22
JP 2004534344	FTERM	2H111/EA03; 2H111/EA12; 2H111/EA22; 2H111/EA25; 2H111/EA32; 2H111/EA43; 2H111/EA01; 2H111/EA14; 2H111/EA15; 2H111/EA21; 2H111/EA44; 2H111/EA45; 2H111/EA02; 2H111/EA03; 2H111/EA07; 4H056/CA01; 4H056/CA02; 4H056/CC05; 4H056/CC08; 4H056/CD05; 4H056/CE03; 4H056/CE07; 4H056/DD03; 4H056/DD07; 4H056/DD15; 4H056/DD19; 4H056/DD29; 5D029/JA04; 5D029/JB28; 5D029/JB46; 5D029/JB47; 5D029/LA02; 5D029/LA11; 5D029/LB07; 5D029/LB12; 5D029/LB17; 5D029/LC08; 5D121/AA01; 5D121/AA04; 5D121/EE02; 5D121/EE03; 5D121/EE22
US 2005042407	NCL ECLA	428/064.400 C07D217/14; C07D221/04B; C07D311/12; C07D311/80; C07D455/04; C07D491/04+311B+221B; C07F015/06B; C09B023/00S; C09B023/04; C09B023/10B; C09B029/00H2; C09B029/00H10; C09B029/36; C09B044/10; C09B047/04B; C09B047/08B; C09B047/26; C09B069/02; C09K009/02;

OS MARPAT 137:286546

AB The invention relates to an ***optical*** data carrier contg. a preferably transparent substrate which has optionally been coated with at least one reflection layer. An ***information*** layer which can be written with light, optionally at least one reflection layer and optionally a protective layer or another substrate or a covering layer are applied to the surface of the substrate. The data carrier can be written and read with blue or red light, preferably ***laser*** light. The ***information*** layer contains at least one xanthene dye contg. at least two anionic groups and having, as a counterion, at least one cation contg. at least one conjugated .pi.-system having at least 6 .pi.-electrons as a light-absorbing compd.; the layer optionally contains a binding agent. The dye cation cannot be benzyltrimethylammonium, benzyltriethylammonium, tetraphenylphosphonium, butyltriphenylphosphonium and ethyltriphenylphosphonium. The xanthene dye has an absorption max. of 420-650 nm. The dyes, their prepn. and use, and the prepn. of the ***optical*** data carrier are also claimed.

ST ***optical*** data carrier ***disk*** xanthene dye light absorber

IT ***Optical*** ROM ***disks***

(***optical*** data carriers contg. xanthene dyes as light-absorbing compd. in ***information*** recording layer)

IT Dyes

(xanthene; prepn. of xanthene dyes and use as light-absorbing compd. in ***information*** layer of ***optical*** data carriers)

IT 465544-25-6P 465544-27-8P 465544-28-9P 465544-29-0P 465544-30-3P
465544-31-4P 465544-32-5P 465544-34-7P 465544-35-8P 465544-36-9P
465544-37-0P 465544-39-2P 465544-41-6P 465544-42-7P 465544-43-8P
465544-44-9P 465544-46-1P 465544-47-2P 465544-49-4P 465544-51-8P
465544-52-9P 465544-54-1P 465544-56-3P 465544-59-6P 465544-61-0P
465544-63-2P 465544-64-3P 465544-67-6P 465547-82-4P 465547-83-5P
465547-85-7P 465547-86-8P 465547-88-0P 465547-89-1P
465547-91-5P

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(prepn. of xanthene dyes and use as light-absorbing compd. in ***information*** layer of ***optical*** data carriers)

IT 1282-37-7, Ferrocenium tetrafluoroborate 465544-24-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of xanthene dyes and use as light-absorbing compd. in ***information*** layer of ***optical*** data carriers)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

- RE
- (1) Ciba Geigy Ag; EP 0805441 A 1997 CAPLUS
 - (2) Ciba Geigy Ag; EP 0805441 A 1997 CAPLUS
 - (3) Edward Gurr Ltd; GB 1057594 A 1967 CAPLUS
 - (4) Edward Gurr Ltd; GB 1057594 A 1967 CAPLUS
 - (5) Ici Plc; EP 0542420 A 1993 CAPLUS
 - (6) Ici Plc; EP 0542420 A 1993 CAPLUS
 - (7) Neckers, D; US 4924009 A 1990 CAPLUS
 - (8) Neckers, D; US 4924009 A 1990 CAPLUS
 - (9) Sato, T; US 4656121 A 1987 CAPLUS
 - (10) Sato, T; US 4656121 A 1987 CAPLUS
 - (11) Wariishi, K; US 6020105 A 2000 CAPLUS
 - (12) Wariishi, K; US 6020105 A 2000 CAPLUS

L9 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:193169 CAPLUS

DN 136:254596

ED Entered STN: 17 Mar 2002

TI ***Optical*** recording ***medium*** such as DVD-R containing organic dyes as light absorbing agent to form bits on substrate

IN Matsui, Fumio; Aisawa, Yasushi; Matsuura, Hiroshi

PA Hayashibara Biochemical Laboratories, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G11B007-24

ICS G11B007-24; B41M005-26; C07D209-14; C07D209-60; C07D263-62;
C07D277-64; C07D277-84; C07D285-08; C07D285-135; C07D293-12;

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002074740	A2	20020315	JP 2000-254767	20000825
	US 2002034605	A1	20020321	US 2001-928833	20010814
	EP 1191526	A2	20020327	EP 2001-307143	20010822
	EP 1191526	A3	20020417		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	EP 1369861	A2	20031210	EP 2003-77506	20010822
	EP 1369861	A3	20031217		
	R: DE, FR, GB, NL				
PRAI	JP 2000-254767	A	20000825		
	EP 2001-307143	A3	20010822		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	JP 2002074740	ICM	G11B007-24
		ICS	G11B007-24; B41M005-26; C07D209-14; C07D209-60; C07D263-62; C07D277-64; C07D277-84; C07D285-08; C07D285-135; C07D293-12; C09B023-00; C09B045-00
	US 2002034605	NCL	428/064.400
		ECLA	C09B023/00D; C09B023/02; C09B023/14H; C09B045/34; G11B007/0045R; G11B007/244; G11B007/247; G11B007/249
	EP 1191526	ECLA	C09B023/00D; C09B023/02; C09B023/14H; C09B045/34; G11B007/0045R; G11B007/244; G11B007/247; G11B007/249
	EP 1369861	ECLA	G03G007/00B4B2; G11B007/0045R; G11B007/244; G11B007/247
AB	The title	***optical***	recording ***medium*** has recording layers contg. an org. dye on a substrate, wherein the wavelength of the max. light absorptions of the dye is larger than the wavelength of recording light. The ***optical*** recording ***medium*** provides the low prodn. cost using the org. dyes.
ST	***optical***	recording DVD org dye light absorbing agent	
IT	Erasable	***optical***	***disks***
	Optical	recording materials	
	(***optical***	recording ***medium*** such as DVD-R contg. org. dyes as light absorbing agent for forming bits on substrate)
IT	Dyes		
	(org.;	***optical***	recording ***medium*** such as DVD-R contg. org. dyes as light absorbing agent for forming bits on substrate)
IT	23178-67-8	***57866-24-7***	61575-72-2 95472-93-8 199665-48-0
	403815-49-6	403815-51-0	403815-53-2 403815-55-4 403980-96-1
	RL: TEM (Technical or engineered material use); USES (Uses)		
	(org. dye in recording layers of	***optical***	recording ***medium***)

L9 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:105119 CAPLUS

DN 132:158980

ED Entered STN: 15 Feb 2000

TI ***Optical*** recording material using dye comprising azo metal chelate and cyanine cation

IN Sato, Tsutomu; Ueno, Yasunobu

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41M005-26

ICS C09B045-14; G11B007-24

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000043420	A2	20000215	JP 1998-218960	19980803

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

JP 2000043420 ICM B41M005-26
ICS C09B045-14; G11B007-24

OS MARPAT 132:158980

GI

/ Structure 6 in file .gra /

AB The ***optical*** recording material comprises a support with an optional undercoat layer, a recording layer contg. .gtoreq.1 of I, (R1-4 = H, halo, nitro, OH, carboxy, cyano, sulfone, alkyl, aryl, alkoxy, carbamoyl, heterocycle, sulfonamide, amino, etc.; a, b, c, d = 0-4; X, Y = OH, carboxy, sulfonic acid deriv., amino; M = 2 or 3-valent metal atom which may have O, halo, etc.; n = 1-2; A, B = atoms to form a heterocycle; R5 = H, monovalent substituent) and an optional reflection layer, a protective layer, or 2nd substrate with an adhesion layer. The material shows good lightfastness and storage stability, recordable and readable by ***laser*** beam with wavelength .ltoreq.700 nm, and is useful for CD-R (compact disk recordable) and DVD-R (digital video disk-recordable).

ST ***optical*** recording material dye; azo metal chelate cyanine cation dye; compact ***disk*** digital video ***optical*** recording

IT ***Optical*** recording materials
(***optical*** recording material using dye comprising azo metal chelate and cyanine cation)

IT ***Optical*** ROM ***disks***
(recordable; ***optical*** recording material using dye comprising azo metal chelate and cyanine cation)

IT 138690-22-9 258285-08-4 258285-10-8 258285-13-1 258285-15-3
258285-18-6 258285-20-0 258285-22-2 258285-24-4 258285-26-6
258285-28-8 258285-30-2 258285-33-5 ***258285-36-8***
258285-38-0 258285-40-4 258285-42-6

RL: DEV (Device component use); USES (Uses)
(***optical*** recording material using dye comprising azo metal chelate and cyanine cation)

L9 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:488337 CAPLUS

DN 129:142665

ED Entered STN: 05 Aug 1998

TI ***Optical*** recording ***medium***

IN Kambe, Emiko; Shinkai, Masahiro; Kitagawa, Sumiko; Monden, Atsushi

PA TDK Corp., Japan

SO PCT Int. Appl., 103 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM B41M005-26

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9829257	A1	19980709	WO 1997-JP4735	19971222
W: CA, JP, KR, MX, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2247338	AA	19980709	CA 1997-2247338	19971222
CA 2247338	C	20010130		
EP 887202	A1	19981230	EP 1997-949192	19971222
EP 887202	B1	20040506		
R: DE, ES, FR, GB, LU, NL, IE				
JP 3364231	B2	20030108	JP 1998-529819	19971222
PRAI JP 1996-357891	A	19961227		
JP 1997-96735	A	19970331		
WO 1997-JP4735	W	19971222		

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 9829257 ICM B41M005-26
 WO 9829257 ECLA G11B007/249
 EP 887202 ECLA G11B007/249
 GI

/ Structure 7 in file .gra /

AB An ***optical*** recording ***medium*** permitting excellent recording and reprodn. within the wavelength region of prior art and/or a short wavelength region of about 630 to 690 nm, which contains in the recording layer a salt-forming dye composed of an ion of an azo-metal complex of general formula (A-N=N-B)_mM [A = an arom. group substituted with an active hydrogen group at a position adjacent to the diazo group or a nitrogenous heteroarom. group having a nitrogen atom capable of coordinating to the oxovanadium at a position adjacent to the carbon atom to which the diazo group is bonded; B = an arom. group having an active hydrogen group at a position adjacent to the diazo group; m = 1-2; M = central metal], and an ion of a cyanine dye of general formula I [Q1, Q2 = atoms forming 5-membered N-contg. ring; L = methyne; R1, R2 = alkyl] and exhibiting a complex index of refraction wherein the imaginary part k is 0.20 or below in the wavelength regions of a recording beam and/or reproducing beam, or at least one member selected from among azooxovanadium metal complexes wherein the ligands are azo compds. of general formula A-N=N-B [A, B = same as above], and metal complexes wherein the ligands are azo compds. of general formula II or III [X = active hydrogen group; R1, R2 = C2-8-alkyl; R = nitro; n = 0, 1].

ST ***optical*** recording material recordable compact ***disk***

IT ***Optical*** ROM ***disks***

Optical memory devices

Optical recording materials

(***optical*** recording ***medium***)

IT 3695-43-0D, transition metal complexes 4866-92-6D, transition metal complexes 7439-96-5D, Manganese, azo dye complexes, uses 7440-02-0D, Nickel, azo dye complexes, uses 14847-56-4D, transition metal complexes 32049-99-3D, transition metal complexes 35976-21-7D, transition metal complexes 49745-06-4 50783-80-7D, transition metal complexes 50783-81-8D, transition metal complexes 50783-82-9D, transition metal complexes 50783-83-0D, transition metal complexes 68332-08-1 73296-60-3 83688-78-2D, transition metal complexes 113352-40-2 121482-72-2 123071-49-8 145818-05-9 162023-05-4 171889-56-8 180870-06-8D, transition metal complexes 180870-08-0D, transition metal complexes 186416-14-8 189189-13-7 189189-18-2 189189-20-6 210556-32-4 210556-34-6 210556-37-9 210556-40-4 210556-41-5 210556-46-0D, transition metal complexes 210556-47-1D, transition metal complexes 210556-48-2D, transition metal complexes 210556-49-3D, transition metal complexes 210556-50-6D, transition metal complexes 210556-51-7D, transition metal complexes 210556-55-1D, transition metal complexes 210556-56-2D, transition metal complexes 210556-57-3D, transition metal complexes 210556-58-4D, transition metal complexes 210556-59-5D, transition metal complexes 210556-60-8D, transition metal complexes 210556-61-9D, transition metal complexes 210556-62-0D, transition metal complexes 210556-63-1 210556-64-2 210556-65-3 ***210556-66-4*** 210556-67-5 210556-68-6 210556-69-7 210556-70-0 210556-71-1 210556-72-2 210556-73-3 210556-74-4 210556-75-5

RL: DEV (Device component use); USES (Uses)

(in ***optical*** recording ***medium***)

IT 7440-48-4DP, Cobalt, azo dye complexes, preparation 7440-62-2DP, Vanadium, oxo azo dye complexes, preparation 20059-24-9DP, transition metal complexes 50783-86-3DP, transition metal complexes 50783-87-4DP, transition metal complexes 210556-42-6DP, transition metal complexes 210556-43-7DP, transition metal complexes 210556-44-8DP, transition metal complexes 210556-45-9DP, transition metal complexes 210556-52-8DP, transition metal complexes 210556-53-9DP, transition metal complexes 210556-54-0DP, transition metal complexes

RL: DEV (Device component use); SPN (Synthetic preparation); PREP

(Preparation); USES (Uses)

(in ***optical*** recording ***medium***)

IT 91-68-9 96-91-3, 2-Amino-4,6-dinitrophenol 99-07-0,
3-N,N-Dimethylaminophenol 99-57-0, 2-Amino-4-nitrophenol 111-18-2,
N,N,N'-Tetramethyl-1,6-diaminohexane 118-46-7, 8-Amino-2-naphthol
121-88-0, 2-Amino-5-nitrophenol 135-19-3, 2-Naphthol, reactions
150-19-6, 3-Methoxyphenol 4487-50-7, 2-Amino-4-nitropyridine
7646-79-9, Cobalt chloride, reactions 14024-62-5 43141-69-1,
3-(Dibutylamino)phenol

RL: RCT (Reactant); RACT (Reactant or reagent)
(in prepn. of ***optical*** recording materials)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Mitsubishi Chemical Corp; JP 04361088 A 1992 CAPLUS
- (2) Mitsubishi Chemical Corp; US 5330542 A 1994 CAPLUS
- (3) Mitsubishi Chemical Corp; WO 9118950 A 1994 CAPLUS
- (4) Mitsubishi Chemical Corp; JP 744904 A 1995
- (5) Mitsubishi Chemical Corp; JP 08332772 A 1996 CAPLUS
- (6) Mitsubishi Chemical Corp; JP 09193545 A 1997 CAPLUS
- (7) Mitsui Kagaku K K; JP 08156408 A 1996 CAPLUS
- (8) Mitsui Kagaku K K; JP 940659 A 1997
- (9) Ricoh Co Ltd; JP 106650 A 1998
- (10) Takao, Y; Annual Report, the Asahi Glass Foundation for the Contribution
to Industrial Technology 1981, V39, P273
- (11) Tdk Corp; JP 09323478 A 1997 CAPLUS
- (12) Tdk Corp; US 5679430 A 1997

L9 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:468010 CAPLUS

DN 129:168165

ED Entered STN: 28 Jul 1998

TI ***Optical*** recording ***medium*** containing ***laser***
light-absorbing trimethinecyanine dye

IN Suzuki, Yuko; Umehara, Hideki; Tokuhiko, Atsushi; Taniguchi, Yoshiteru;
Sasakawa, Tomoyoshi; Hirose, Sumio

PA Mitsui Chemicals Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G11B007-24

ICS G11B007-24; B41M005-26; C09B023-00; C07D209-14

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

Section cross-reference(s): 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10188339	A2	19980721	JP 1996-343688	19961224
PRAI	JP 1996-343688		19961224		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 10188339	ICM	G11B007-24
	ICS	G11B007-24; B41M005-26; C09B023-00; C07D209-14

OS MARPAT 129:168165

GI

/ Structure 8 in file .gra /

AB The medium has a recording layer contg. a trimethinecyanine dye I [Y, Y1 =
CR4, R5, O, S, Se, NR6; R1-6= H, C1-12 (un)substituted alkyl; A1-4 = H,
C1-4 alkyl; A1 and A2 or A3 and A4 may form (un)substituted benzene or
naphthalene], where recording wavelength, pitch and depth of groove of a
substrate, and dye thickness are specified by the document. The medium
showed stable tracking in recording.

ST ***optical*** recording trimethinecyanine dye ***laser*** absorber
IT Cyanine dyes

Optical recording materials
(***optical*** recording ***medium*** contg. ***laser***
light-absorbing trimethinecyanine dye)

IT 3520-43-2, NK 1420

RL: DEV (Device component use); USES (Uses)
 (NK 1420; ***optical*** recording ***medium*** contg.
 laser light-absorbing trimethinecyanine dye)
 IT ***905-96-4*** , NK 85
 RL: DEV (Device component use); USES (Uses)
 (NK 85; ***optical*** recording ***medium*** contg.
 laser light-absorbing trimethinecyanine dye)
 IT 25470-94-4, NK 79 73075-34-0, NK 1056
 RL: DEV (Device component use); USES (Uses)
 (***optical*** recording ***medium*** contg. ***laser***
 light-absorbing trimethinecyanine dye)

L9 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1997:204438 CAPLUS
 DN 126:256922
 ED Entered STN: 28 Mar 1997
 TI Solid-state dye ***laser*** host
 IN Kessler, William J.; Davis, Steven J.; Ferguson, Daniel R.; Pugh, Evan R.
 PA Physical Sciences, Inc., USA
 SO U.S., 17 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM H01S003-14
 INCL 372039000
 CC 73-10 (Optical, Electron, and Mass Spectroscopy and Other Related
 Properties)
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5610932	A	19970311	US 1995-377656	19950125
PRAI US 1995-377656		19950125		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5610932	ICM	H01S003-14
	INCL	372039000
US 5610932	NCL	372/039.000; 372/053.000

AB Solid-state dye ***laser*** ***media*** comprise a polyacrylamide
 gelatin solid host doped with a ***laser*** dye. Processes for
 formulating the solid-state dye ***laser*** hosts entail combining
 acrylamide with a crosslinking agent in the presence of catalysts and
 initiators, and, before a polymn. reaction which formulates a
 substantially gelatin structure, doping the acrylamide mixt. with a
 laser dye having one or more base solvents. ***Lasers***
 employing the ***media*** are also described. The solid state dye
 host may exhibit self healing after photobleaching due to dye migration
 within the encapsulated form.
 ST ***laser*** ***medium*** dye doped polyacrylamide gel; solid state
 dye ***laser***
 IT Solid state ***lasers***
 (dye; polyacrylamide gel-based solid-state dye ***laser*** hosts)
 IT Dyes
 (***laser*** ; polyacrylamide gel-based solid-state dye
 laser hosts)
 IT Dye ***lasers***
 (solid-state; polyacrylamide gel-based solid-state dye ***laser***
 hosts)
 IT 90-33-5
 RL: DEV (Device component use); MOA (Modifier or additive use); USES
 (Uses)
 (Coumarin 456; polyacrylamide gel-based solid-state dye ***laser***
 hosts)
 IT 87-01-4
 RL: DEV (Device component use); MOA (Modifier or additive use); USES
 (Uses)
 (Coumarin 461; polyacrylamide gel-based solid-state dye ***laser***
 hosts)
 IT 20571-42-0, LD 466
 RL: DEV (Device component use); MOA (Modifier or additive use); USES
 (Uses)
 (Coumarin 466, LD 466; polyacrylamide gel-based solid-state dye

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    ***laser***  hosts)
IT  41175-45-5, Coumarin 478
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (Coumarin 478; polyacrylamide gel-based solid-state dye    ***laser***
        hosts)
IT  87349-92-6, Coumarin 510
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (Coumarin 510; polyacrylamide gel-based solid-state dye    ***laser***
        hosts)
IT  58336-35-9, LD 490
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (Coumarin 6H, LD 490; polyacrylamide gel-based solid-state dye
        ***laser***  hosts)
IT  51325-95-2, DCM II
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (DCM II; polyacrylamide gel-based solid-state dye    ***laser***
        hosts)
IT  19764-95-5, DMOTC
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (DMOTC; polyacrylamide gel-based solid-state dye    ***laser***  hosts)
IT  905-97-5, DTCI
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (DTCI; polyacrylamide gel-based solid-state dye    ***laser***  hosts)
IT  57472-19-2, DTP
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (DTP; polyacrylamide gel-based solid-state dye    ***laser***  hosts)
IT  122-99-6
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (EPH; polyacrylamide gel-based solid-state dye    ***laser***  hosts)
IT  19764-96-6
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (Hexacyanine 3, HITC Iodide; polyacrylamide gel-based solid-state dye
        ***laser***  hosts)
IT  57980-10-6, LD 390
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (LD 390, Quinolone 390; polyacrylamide gel-based solid-state dye
        ***laser***  hosts)
IT  137993-41-0, LD 800
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (LD 800, Rhodamine 800; polyacrylamide gel-based solid-state dye
        ***laser***  hosts)
IT  76433-27-7, LDS 730
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (LDS 730, Styryl 6; polyacrylamide gel-based solid-state dye
        ***laser***  hosts)
IT  89872-07-1, LDS 750
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (LDS 750, Styryl 7; polyacrylamide gel-based solid-state dye
        ***laser***  hosts)
IT  92479-59-9, LDS 798
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (LDS 798, Styryl 11; polyacrylamide gel-based solid-state dye
        ***laser***  hosts)
IT  82988-08-7, LDS 821
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
    (Uses)
        (LDS 821, Styryl 9, Styryl 9M; polyacrylamide gel-based solid-state dye
        ***laser***  hosts)

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IT 41593-38-8
 RL: DEV (Device component use); MOA (Modifier or additive use); USES
 (Uses)
 (PPH; polyacrylamide gel-based solid-state dye ***laser*** hosts)

IT 16650-80-9, Phenoxazone 9
 RL: DEV (Device component use); MOA (Modifier or additive use); USES
 (Uses)
 (Phenoxazone 9, Phenoxazone 660; polyacrylamide gel-based solid-state
 dye ***laser*** hosts)

IT 110-18-9 7727-54-0, Ammonium persulfate
 RL: CAT (Catalyst use); USES (Uses)
 (polyacrylamide gel-based solid-state dye ***laser*** hosts)

IT 9003-05-8 25034-58-6, N,N'-Methylenebisacrylamide-acrylamide copolymer
 RL: DEV (Device component use); USES (Uses)
 (polyacrylamide gel-based solid-state dye ***laser*** hosts)

IT 57-55-6, 1,2-Propanediol, uses 76-54-0, Fluorescein 548 81-88-9,
 Rhodamine 610 chloride 91-44-1, Coumarin 460 92-71-7, PPO 92-94-4,
 p-Terphenyl 107-21-1, 1,2-Ethanediol, uses 108-32-7, Propylene
 Carbonate 135-70-6, p-Quaterphenyl 518-47-8, Disodium Fluorescein
 569-64-2, Malachite Green 605-91-4, Pinacyanol 629-20-9,
 Cyclooctatetraene 779-02-2, 9-Methylanthracene 846-63-9, .alpha.-NPO
 852-38-0, PBD ***905-96-4***, DOCI 977-96-8, PICI 989-38-8,
 Rhodamine 6B 1643-20-5, Ammonyx LO 1806-34-4, POPOP 2039-68-1, DPS
 2083-09-2, BBO 2156-29-8, DASPI 2642-25-3, DQTCI 3028-97-5, DASBTI
 3071-70-3, DTTC 3520-42-1, Kiton Red 620 3599-32-4, IR-125
 4727-50-8, Cryptocyanine 4846-34-8, NCI 13161-28-9, Rhodamine 590
 perchlorate 13280-61-0, Bis-MSB 13558-31-1 14187-31-6, DDI
 14806-50-9 15082-28-7, Butyl PBD 15185-43-0, DOTC 16595-48-5
 17064-47-0, PBBO 18434-08-7, BBQ 19125-99-6, Fluorol 555 20591-23-5,
 DCI 23178-67-8, HDITC 23857-51-4, Rhodamine 610 Perchlorate
 23857-69-4, Rhodamine 3B Perchlorate 24796-94-9, Oxazine 725
 25152-49-2, Rhodamine 575 25470-94-4, HICI 26078-25-1, Coumarin 450
 26093-31-2, Coumarin 440 27344-41-8, Stilbene 420 27425-55-4, Coumarin
 535 28821-18-3, Coumarin 445 32151-96-5, DQOCI 36536-22-8, HIDC
 38215-36-0, Coumarin 540 38465-55-3 41044-12-6, Coumarin 515
 41267-76-9, Coumarin 480 41830-80-2, Cresyl violet 670 perchlorate
 41830-81-3, LD 690 41934-47-8, Coumarin 481 47450-63-5, DMETCI
 51325-91-8, 4-Dicyanomethylene-2-methyl-6-p-dimethylaminostyryl-4H-pyran
 52840-38-7, Coumarin 500 53092-64-1, DMT 53340-16-2, Nile Blue 690
 53518-14-2, Coumarin 485 53518-15-3, Coumarin 490 53518-18-6, Coumarin
 540A 53518-19-7, Coumarin 522 53655-17-7, IR-140 54849-65-9, IR-143
 54849-69-3, IR-144 55804-65-4, Coumarin 519 55804-66-5, Coumarin 504
 55804-67-6, Coumarin 521 55804-68-7, Coumarin 523 55804-70-1, Coumarin
 503 58336-37-1, LD 423 58721-74-7, LD 473 60311-02-6, Sulforhodamine
 640 61010-01-3, IR5 62669-60-7, Oxazine 720 62669-62-9, IR-132
 63561-42-2, LD 700 Perchlorate 65767-27-3 72102-91-1, Rhodamine 640
 Perchlorate 76433-29-9, LDS 751 76871-75-5, IR-26 83846-69-9, DNTTCI
 85256-40-2, Oxazine 750 Perchlorate 85642-10-0, Coumarin 525
 85642-11-1, Coumarin 545 87004-02-2, LDS 698 87331-48-4, Coumarin 498
 89072-57-1, Coumarin 487 89703-14-0, TBS 89703-16-2, QUI 89750-25-4,
 LD 688 89846-21-9, LDS 722 94507-05-8, LDS 925 111458-33-4, Exalite
 384 111488-20-1, Exalite 389 114932-35-3, DMQ 118216-60-7, Exalite
 392E 121207-31-6, Pyrromethene 546 121461-69-6, Pyrromethene 556
 124709-25-7 131083-16-4 137262-28-3, Exalite 416 138452-24-1, LD 425
 138531-92-7, Exalite 398 150825-67-5, LDS 759 153307-11-0, Exalite 404
 154530-43-5, LDS 765 161937-34-4, Exalite 377E 173406-98-9, Exalite
 392A 188437-71-0 188437-72-1 188652-66-6, Coumarin 522B
 188652-71-3, DaQTeC 188652-72-4, DCM Special 188652-73-5, DDBCI
 188652-74-6, DNOTPC 188652-75-7 188652-77-9, DTOCI 188652-78-0,
 Exalite 400E 188652-79-1, Exalite 351 188652-80-4, Exalite 378
 188652-85-9, Exalite 411 188652-86-0, Exalite 417 188652-87-1, Exalite
 428 188652-92-8, LD 489 188652-93-9, LDS 720 188652-94-0, LDS 867
 188653-01-2, OQTCI 188653-02-3, OQTICI 188653-08-9, Saturable Absorber
 580
 RL: DEV (Device component use); MOA (Modifier or additive use); USES
 (Uses)
 (polyacrylamide gel-based solid-state dye ***laser*** hosts)

TI Preparation of quaternary ammonium compounds and methine compounds as
optical recording materials

IN Hioki, Takanori

PA Fuji Photo Film Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C07D209-08

ICS B41M005-26; C07D215-06; C07D235-08; C07D263-56; C07D263-60;

C07D277-22; C07D277-64; C07D293-12; C07D403-06; C07D417-06;

C09B023-00; G03C001-12; G03C001-18; G03C001-22

CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08269009	A2	19961015	JP 1995-75167	19950331
PRAI	JP 1995-75167		19950331		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 08269009	ICM	C07D209-08
	ICS	B41M005-26; C07D215-06; C07D235-08; C07D263-56; C07D263-60; C07D277-22; C07D277-64; C07D293-12; C07D403-06; C07D417-06; C09B023-00; G03C001-12; G03C001-18; G03C001-22

OS MARPAT 126:74826

GI

/ Structure 9 in file .gra /

AB The title compds. [I and II; R = CH₂CH₂CHR₂SO₃-, CH₂CH₂C(CH₂Ph)₂SO₃-; wherein R₂ = Et, Ph, CH₂Ph, allyl; Z₁, Z₂ = a group of atoms required to form a 5- to 6-membered N-contg. heterocyclic ring; n, m = 0,1; R₁ = a compd. residue required to form a methine compd.; M₁ = a counter ion neutralizing the charge; l = no. of 0-4 required to neutralize the charge], which are useful as coloring agents, light absorbing agents, dyes for ***optical*** ***disks***, mol. photosensitizers for silver halide photog. or electrophotog., or drugs, are prepd. Thus, benzoxazolium deriv. (III; R = Et) and Et orthopropionate were heated in AcOH and pyridine at 140.degree. for 2 h to give, after salt change with AcOK, the title compd. (IV; R = Et, M = K+). A dye thin film (100 nm) made of IV (R = Ph, M = K+) on a glass substrate was irradiated with a ***laser*** beam at 532 nm and 1 mW intensity for 10 s and the irradiated part showed the destruction of the film, confirming that the dyes film functioned as an ***optical*** ***disk***.

ST methine dye prepn ***optical*** recording material; ***laser***
optical ***disk***; benzoxazolium salt prepn ***optical***
recording material

IT Cyanine dyes

Optical recording materials
(prepn. of quaternary ammonium compds. and methine compds. as
optical recording materials)

IT 98-09-9, Benzenesulfonyl chloride 100-39-0, Benzyl bromide 106-95-6,
Allyl bromide, reactions 107-21-1, 1,2-Ethanediol, reactions 115-80-0,
Ethyl orthopropionate 1120-71-4, 1,3-Propanesultone 5676-56-2,
5-Bromo-2-methylbenzoxazole 10147-36-1, Propylsulfonyl chloride
61931-68-8, 5-Phenyl-2-methylbenzoxazole 85163-68-4 89976-17-0,
5-Iodo-2-methylbenzoxazole

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of quaternary ammonium compds. and methine compds. as
optical recording materials)

IT 26910-63-4P 69873-07-0P 75732-43-3P 185016-63-1P 185016-64-2P
185016-65-3P 185016-66-4P 185016-67-5P 185016-68-6P 185016-69-7P
185016-70-0P 185016-83-5P 185016-84-6P 185016-85-7P

185016-87-9P 185016-89-1P 185019-64-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
 (prepn. of quaternary ammonium compds. and methine compds. as
 optical recording materials)
 IT ***185016-71-1P*** ***185016-72-2P*** ***185016-74-4P***
 185016-75-5P ***185016-76-6P*** ***185016-77-7P***
 185016-78-8P ***185016-79-9P*** ***185016-80-2P***
 185016-81-3P ***185016-82-4P***
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (prepn. of quaternary ammonium compds. and methine compds. as
 optical recording materials)

L9 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:881533 CAPLUS
 DN 123:301631
 ED Entered STN: 27 Oct 1995
 TI ***Optical*** data memory ***media*** with multiple data layers
 PA International Business Machines Corp., USA
 SO Jpn. Kokai Tokkyo Koho, 24 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM G11B007-24
 ICS G11B007-24; B41M005-26; G11B007-00
 CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07201077	A2	19950804	JP 1994-253910	19941019
	CA 2134140	C	19981215	CA 1994-2134140	19941024
	EP 658887	A1	19950621	EP 1994-309239	19941209
	EP 658887	B1	20000223		
	R: DE, FR, GB				
	KR 162122	B1	19981215	KR 1994-33390	19941209
	CN 1069432	B	20010808	CN 1994-119323	19941213
PRAI	US 1993-167714	A	19931215		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 07201077	ICM	G11B007-24
	ICS	G11B007-24; B41M005-26; G11B007-00
EP 658887	ECLA	G11B007/24; G11B007/24R; G11B007/244; G11B007/247; G11B007/248; G11B007/249; G11B007/258

AB The data surfaces of the title media are coated with specific dyes and
 sepd. via radiation transmitting material layers to adjust the reflection
 signals from the data surfaces.
 ST ***optical*** data memory ***media*** multiple layer
 IT Memory devices
 Recording materials
 (***optical*** , ***optical*** data memory ***media*** with
 multiple data layers)
 IT Memory devices
 (***optical*** ***disks*** , read-only, ***optical*** data
 memory ***media*** with multiple data layers)
 IT Coating materials
 (reflective, ***optical*** data memory ***media*** with
 multiple data layers)
 IT 77-09-8D, Phenolphthalein, derivs. 147-14-8, Copper phthalocyanine
 514-73-8, Diethylthiadibocarbocyanine iodide 660-68-4, Diethylammonium
 chloride 2475-45-8, 1,4,5,8-Tetraaminoanthraquinone ***2581-86-4***
 3317-67-7, Cobalt phthalocyanine 3568-36-3 63842-83-1,
 Hydroxysquarylium 131443-20-4, 1,1'-Dibutyl-3,3,3',3'-tetramethyl-
 4,5,4',5'-dibenzoindodicarbocyanine perchlorate 169381-61-7
 RL: DEV (Device component use); USES (Uses)
 (data surface of ***optical*** data memory coated with)

L9 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1994:591142 CAPLUS
 DN 121:191142
 ED Entered STN: 15 Oct 1994
 TI Silver halide photographic emulsion and light-sensitive silver halide

photographic material
IN Tanaka, Shigeo; Kaga, Makoto; Ikeda, Tsuyoshi
PA Konica Co., Japan
SO Eur. Pat. Appl., 49 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM G03C001-005
ICS G03C001-015; G03C007-30; G03C001-14; G03C001-16; G03C001-18
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 593177	A1	19940420	EP 1993-307705	19930929
	EP 593177	B1	19980715		
	R: DE, FR, GB, NL				
	JP 06123927	A2	19940506	JP 1992-274522	19921013
	JP 3038422	B2	20000508		
	US 5403705	A	19950404	US 1993-127788	19930928
PRAI	JP 1992-274522	A	19921013		

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 593177	ICM	G03C001-005
	ICS	G03C001-015; G03C007-30; G03C001-14; G03C001-16; G03C001-18
EP 593177	ECLA	G03C001/005; G03C001/08; G03C001/14; G03C001/83C; G03C007/30L
US 5403705	NCL	430/570.000; 430/517.000; 430/522.000; 430/546.000; 430/569.000; 430/581.000; 430/582.000; 430/583.000; 430/584.000; 430/585.000
	ECLA	G03C001/005; G03C001/08; G03C001/14; G03C001/83C; G03C007/30L

OS MARPAT 121:191142
GI

/ Structure 10 in file .gra /

AB The title light-sensitive material comprises a support having thereon a Ag halide emulsion layer, and the Ag halide emulsion layer comprises Ag halide grains having a AgCl content of .gtoreq.95 mol%. The emulsion is optically sensitized by addn. of a dispersion of an ***optical*** sensitizer comprising a ***medium*** and particles of the dye dispersed in the medium. The ratio of Ag to gelatin (Ag/Gel) in the emulsion at the time of addn. of the dispersion of the dye is 2 to 8.5. In the title material, the ***optical*** sensitizer is represented by I, II, or III [Z11 and Z12 are each a group of atoms necessary to complete a nucleus of oxazole, thiazole, selenazole, pyridine, benzoxazole, benzothiazole, benzoselenazole, benzimidazole, naphthoxazole, naphthothiazole, naphthoselenazole, naphthimidazole or quinoline; R11 and R12 are each an alkyl group, an alkenyl group or an aryl group; X- an anion; and m is zero or 1, wherein Z21 and Z22 are same as Z11 and Z12; R21 and R22 are the same as R11 and R12; Z31 and Z32 are each a group of atoms necessary to complete a nucleus of benzoxazole, benzothiazole, benzoselenazole, naphthoxazole, naphthothiazole, naphthoselenazole or quinoline; R31 and R32 are the same as R11 and R12]. The material has improved storage stability.

ST photog emulsion ***optical*** sensitizer
IT Photographic emulsions
(for improved storage stability)

IT Photographic sensitizers
(solid dispersion of methine dye as)

IT 4622-66-6 ***47867-58-3*** 64409-28-5 67132-51-8 70211-20-0
70211-26-6 ***106518-54-1*** 113477-02-4 ***123820-83-7***
145977-69-1
RL: PROC (Process)
(photog. sensitizer from solid dispersion of)

AN 1994:496196 CAPLUS
DN 121:96196
ED Entered STN: 20 Aug 1994
TI ***Optical*** recording ***medium***
IN Miyadera, Toshiyuki; Okano, Makoto; Matsui, Fumio
PA Pioneer Electronic Corp., Japan
SO U.S., 9 pp. Cont. of U.S. Ser. No. 679,489, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM G03C001-00
ICS G11B007-24
INCL 430495000
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5316899	A	19940531	US 1993-807	19930105
	JP 04153928	A2	19920527	JP 1990-277194	19901015
	JP 2842939	B2	19990106		
PRAI	JP 1990-277194	A	19901015		
	US 1991-679489	B1	19910402		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5316899	ICM	G03C001-00
	ICS	G11B007-24
	INCL	430495000
US 5316899	NCL	430/270.200; 346/135.100; 369/284.000; 369/288.000; 430/945.000
	ECLA	G11B007/241; G11B007/247

GI

/ Structure 11 in file .gra /

AB An ***optical*** recording ***medium*** is described having a pair of recording films each contg. I and II resp. which have a predetd. light absorption distribution and have step absorption end slopes which are closer to each other. The difference between the wavelengths of recording or reprodn. lights for these 2 recording films may be close to .apprx.50 nm. A common ***optical*** system may be used for recording or reprodn. operation for the 2 recording films, whereby the ***optical*** system may be simplified.

ST ***optical*** recording dye cyanine

IT Recording materials
(***optical*** , cyanine dyes for)

IT 34157-25-0 ***34215-57-1***
RL: USES (Uses)
(in ***optical*** recording materials)

L9 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1993:428132 CAPLUS
DN 119:28132
ED Entered STN: 24 Jul 1993
TI Preparation of benzothiazolylmethine compounds and quaternary ammonium salts
IN Okazaki, Masaki; Kato, Takashi; Fujiwara, Toshinori; Ikegawa, Akihiko; Nishigaki, Junji; Kawada, Ken
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C07D213-20
ICS B41M005-26; C07D215-10; C07D233-60; C07D235-08; C07D263-32;
C07D263-56; C07D263-62; C07D277-22; C07D277-64; C07D293-06;
C07D293-12; C07D401-06; C07D401-14; C07D413-06; C07D413-14;
C07D417-06; C07D417-14; C07D421-06; C09B023-00
CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 41, 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04334369	A2	19921120	JP 1991-128249	19910502
PRAI	JP 1991-128249		19910502		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 04334369	ICM	C07D213-20
	ICS	B41M005-26; C07D215-10; C07D233-60; C07D235-08; C07D263-32; C07D263-56; C07D263-62; C07D277-22; C07D277-64; C07D293-06; C07D293-12; C07D401-06; C07D401-14; C07D413-06; C07D413-14; C07D417-06; C07D417-14; C07D421-06; C09B023-00

OS MARPAT 119:28132

GI

/ Structure 12 in file .gra /

AB The title compds., e.g., I, II, useful as coloring materials,
optical ***disk*** dyes, photog. photosensitizing dyes, are
prepd. A mixt. of equimolar benzothiazole III and sulfone IV was heated
at 150.degree., cooled to 100.degree., EtOAc was added with stirring to
give 32% I. II was dissolved in MeOH to a 2% soln., which was spin-coated
onto a glass substrate to give an ***optical*** ***disk***.

ST benzothiazolylmethine prepn photog sensitizer dye

IT Dyes

(benzothiazolylmethine compds.)

IT Photographic sensitizers

(dyes, benzothiazolylmethine compds.)

IT 148242-94-8P 148254-09-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(prepn. and reaction of, in prepn. of photog. sensitizer dyes)

IT 148242-95-9P 148242-96-0P 148242-97-1P ***148242-98-2P***

148254-10-8P 148254-11-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, as photog. sensitizer dye)

IT 115-80-0 763-32-6, 3-Methyl-3-buten-1-ol 61931-68-8,
2-Methyl-5-phenylbenzoxazole

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in prepn. of photog. sensitizer dyes)

IT 5455-50-5, 2-Methyl-1,4-butane sultone

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with benzothiazole deriv., in prepn. of photog.
sensitizer dyes)

IT 1006-99-1, 5-Chloro-2-methylbenzothiazole

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with methylbutane sultone, in prepn. of photog.
sensitizer dyes)

L9 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1991:502928 CAPLUS

DN 115:102928

ED Entered STN: 06 Sep 1991

TI Detection of recording status of ***optical*** recording
medium

IN Hashida, Taku; Ando, Eiji

PA Matsushita Electric Industrial Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G11B007-24

ICS B41M005-26; G11B007-00

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02226527	A2	19900910	JP 1989-45998	19890227
	JP 08027945	B4	19960321		
PRAI	JP 1989-45998		19890227		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 02226527	ICM	G11B007-24
	ICS	B41M005-26; G11B007-00

AB Recording status of an ***optical*** recording ***medium*** is detected by using fluorescence from the medium contg. several dyes whose max. wavelength electronic absorption bands overlap with each other. Preferably, .gtoreq.1 of the dyes is forming J-aggregates, while the others are in monomeric or other aggregate states. The use of fluorescence improves the precision of the detection, because the dyes forming J-aggregates show larger Stokes' shift than the dyes which do not form J-aggregates.

ST ***optical*** recording status detection; dye aggregate

IT ***optical*** recording ***medium***

IT Recording materials
(***optical*** , dye aggregate-contg., recording status detection of)

IT 23857-51-4 ***41664-70-4*** 117204-99-6 135654-79-4
RL: TEM (Technical or engineered material use); USES (Uses)
(***optical*** recording ***medium*** contg., recording status detection of)

L9 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1989:523959 CAPLUS

DN 111:123959

ED Entered STN: 01 Oct 1989

TI Multilayer ***optical*** recording ***media*** using J-aggregate of a cyanine dye

IN Nakano, Atsushi; Shimizu, Shigeo

PA Victor Co. of Japan, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 2 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41M005-26
ICS C09B023-00; C09B023-12; G11B007-24

ICA C07D263-56

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01071789	A2	19890316	JP 1987-227680	19870911
PRAI	JP 1987-227680		19870911		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 01071789	ICM	B41M005-26
	ICS	C09B023-00; C09B023-12; G11B007-24
	ICA	C07D263-56

GI

/ Structure 13 in file .gra /

AB The title ***optical*** recording ***media*** record ***information*** by utilizing the changes in absorption spectrum based on the J-aggregate of the cyanine dye I. The ***optical*** ***media*** are capable of accurate multiple recording and reading. Thus, a soln. contg. I (NK1952) and a long chain pyridinium salt in CHCl3 was developed on distd. water to form a composite monomol. film of the salt and the dye J-aggregate, and the film was placed on a glass substrate to give an ***optical*** recording ***medium***. As the absorption max. of the medium was at 560 nm, accurate and high d.

recording could be carried out.
ST multiple ***optical*** recording ***medium*** ; cyanine dye
optical recording ***medium*** ; J aggregate ***optical***
recording ***medium***
IT Recording materials
(***optical*** , multilayer, J-aggregate of cyanine dyes for)
IT ***33628-03-4*** , NK1952
RL: USES (Uses)
(***optical*** recording material from J-aggregate of)

L9 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1987:619130 CAPLUS
DN 107:219130
ED Entered STN: 12 Dec 1987
TI Effect of the molecular structure on the fluorescent and generated wave
length of the cyanine compounds
AU Vranchev, D.
CS Bulg.
SO Nauchni Trudove - Plovdivski Universitet Paisii Khilendarski (1985), 23(1,
Fiz.), 113-21
CODEN: NTPUB6; ISSN: 0369-6227
DT Journal
LA Bulgarian
CC 41-6 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic
Sensitizers)
GI

/ Structure 14 in file .gra /

AB The generation and fluorescence spectra of cyanine dyes (I; R = H, OMe,
Me, Et; R' = Me, Et, Pr; Z = O, S, Se; n = 0-4) were most affected by R,
Z, and n. A bathochromic shift of the spectral lines was caused by an
increase in n and a hypsochromic shift was caused by an increase in the
electronegativity of Z and by substitution of the H atom in R by alkoxy
and alkyl groups. The nature of R' did not affect the fluorescence
spectra of I. The shifts in fluorescence spectra were explained by
changes in the mobility of .pi.-electrons in the conjugated double bonds
of I which were used as a ***medium*** for tunable org. ***lasers***

ST cyanine dye structure fluorescence; selenium cyanine dye fluorescence
IT Dyes, cyanine
(polymethine, fluorescence spectra of, mol. structure effect on)
IT 514-73-8 ***905-96-4*** , 3,3'-Diethyloxacarbocyanine iodide 905-97-5
1742-91-2, 3,3'-Dimethylthiacarbocyanine iodide 2197-01-5,
3,3'-Diethylthiacyanine iodide 3071-69-0 3071-70-3,
3,3'-Diethylthiatricarbocyanine iodide 14187-31-6 14806-50-9,
3,3'-Diethyloxadicarbocyanine iodide 15185-40-7, 3,3'-Diethyloxacyanine
iodide 15185-43-0, 3,3'-Diethyloxatricarbocyanine iodide 17094-08-5,
3,3'-Diethylthiatetracarbocyanine iodide 17694-03-0 18403-49-1
35077-85-1 35077-88-4 53213-85-7
RL: PRP (Properties)
(fluorescence spectra of, structure effect on)

L9 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1987:186594 CAPLUS
DN 106:186594
ED Entered STN: 29 May 1987
TI ***Optical*** recording ***medium***
IN Inoue, Toshiharu
PA Ricoh Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM B41M005-26
ICS G11B007-24
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 61189990 A2 19860823 JP 1985-30227 19850220
PRAI JP 1985-30227 19850220

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

JP 61189990 ICM B41M005-26
ICS G11B007-24

AB A substrate is coated with a thin film composed of laminated monomol. layers to give an ***optical*** recording ***medium***. The medium is capable of high-d. and high-speed ***optical*** recording. Thus, a 1 .times. 10-3 M N,N'-dioctadecyloxacarbocyanine soln. in CHCl3 was spread on the surface of an aq. CdCl2 soln. (4 .times. 10-4 M) to give a monomol. layer (surface tension 30 dyne-cm-1), which was laminated successively on a glass plate by the Langmuir-Blodgett technique. The obtained ***disk*** was capable of ***optical*** recording with a ***laser*** beam at a track pitch of 3 .mu.m at 10 mW and reproducing signals of 2 mW with C/N = 54 dB.

ST ***optical*** recording ***medium*** monomol layer; Langmuir Blodgett layer ***optical*** recording

IT Dyes, cyanine
(mero-, ***laser*** -sensitive ***optical*** recording materials contg. laminated monomol. layers of)

IT Recording materials
(***optical*** , ***laser*** -sensitive, contg. laminated monomol. dye layers)

IT ***28462-56-8D*** , N,N'-Dioctadecyloxacarbocyanine, salts 40957-95-7D, N,N'-Dioctadecyltrimethineindocarbocyanine, salts 67675-27-8D, N,N'-Dioctadecylheptamethineindocarbocyanine, salts

RL: USES (Uses)
(***laser*** -sensitive ***optical*** recording material contg. laminated monomol. layers of)

IT 506-30-9, Arachic acid
RL: USES (Uses)
(***laser*** -sensitive ***optical*** recording material contg. laminated monomol. layers of merocyanine dye and)

L9 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1974:443833 CAPLUS

DN 81:43833

ED Entered STN: 12 May 1984

TI Effect of the structure of polymethine dyes on the luminescence and generating properties of their solutions

AU Mostovnikov, V. A.; Rubinov, A. N.; Al'perovich, M. A.; Avdeeva, V. I.; Levkoev, I. I.; Loiko, M. M.

CS USSR

SO Zhurnal Prikladnoi Spektroskopii (1974), 20(1), 42-7

CODEN: ZPSBAX; ISSN: 0514-7506

DT Journal

LA Russian

CC 73-6 (Spectra by Absorption, Emission, Reflection, or Magnetic Resonance, and Other Optical Properties)

Section cross-reference(s): 40

GI For diagram(s), see printed CA Issue.

AB Lasing characteristics and the .lambda.max in the absorption and the luminescence spectra are given for I (X = S, O, or CMe2 and n = 0-4), II (X = O, S, or Se; R3 = H or OEt; R4 = H, Me, Et, OMe, Ph, or Br, R5 = H or OEt, R1 or R2 = H or Ph), III (R = Me or Ph), and IV (R = Ac, CO2Et, or V). The dyes III and IV do not show promise as ***laser*** ***media***. The effect of the structure of the dyes on their ***optical*** properties is discussed.

ST polymethine dye ***laser***; luminescence absorption polymethine dye

IT Luminescence
Ultraviolet and visible spectra
(of polymethine dyes)

IT ***Lasers***
(polymethine dye, structural effects on)

IT Dyes, cyanine
(polymethine, lasing characteristics of)

IT 7187-55-5 18403-49-1 20766-55-6 23178-68-9 37069-70-8
37069-75-3 37069-76-4 38912-20-8 47583-43-7 47583-44-8
47812-31-7 52754-39-9 52754-40-2 52754-41-3 52754-42-4

52754-43-5	52754-44-6	52754-45-7	52754-46-8	52754-47-9
52754-48-0	52754-49-1	52754-50-4	52754-51-5	52754-52-6
52754-53-7	52789-42-1	52789-43-2	52844-16-3	52844-17-4
52844-18-5	52845-13-3			

RL: PRP (Properties)

(lasing characteristics of, structural effects on)

=> s (l6 or l5) and (390 or 395 or 400 or 405 or 410 or 415 or 420 or 422 or 425)

21822 390
8178 395
381344 400
11823 405
24269 410
10258 415
39402 420
6257 422
17835 425

L10 71 (L6 OR L5) AND (390 OR 395 OR 400 OR 405 OR 410 OR 415 OR 420 OR 422 OR 425)

=> s (l6 or l5) and ((390 or 395 or 400 or 405 or 410 or 415 or 420 or 422 or 425) (3a)nm)

21822 390
8178 395
381344 400
11823 405
24269 410
10258 415
39402 420
6257 422
17835 425
560468 NM
785 NMS
561078 NM

(NM OR NMS)

35906 (390 OR 395 OR 400 OR 405 OR 410 OR 415 OR 420 OR 422 OR 425) (3A)NM

L11 34 (L6 OR L5) AND ((390 OR 395 OR 400 OR 405 OR 410 OR 415 OR 420 OR 422 OR 425) (3A)NM)

=> d all 1-34

L11 ANSWER 1 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:859324 CAPLUS

DN 143:219354

ED Entered STN: 18 Oct 2004

TI Latent-image formation in tabular AgBr grains: experimental studies

AU Hailstone, R. K.; French, J.; de Keyzer, R.

CS Chester F. Carlson Center for Imaging Science, Rochester Institute of Technology, Rochester, NY, 14623, USA

SO Imaging Science Journal (2004), 52(3), 151-163

CODEN: ISCJFK; ISSN: 1368-2199

PB Maney Publishing

DT Journal

LA English

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

AB Five tabular-grain AgBr emulsions of varying grain thickness were studied. Two were chem. sensitized in the presence of a blue spectral sensitizing dye, whereas the other three were chem. sensitized in the presence of a green spectral sensitizing dye. A companion set of emulsions chem. sensitized in the absence of dye was also prepd. Internal image development of the unsensitized emulsions showed substantial internal image in one emulsion, but minor amts. in the other emulsions. After chem. sensitization, there was no detectable internal image in any of the emulsions. Reciprocity failure data from 10⁻⁴ to 10³ s showed that the emulsions sensitized in the presence of dye had little if any high-irradiance reciprocity failure, suggesting the min. developable size of the latent image was three atoms for the development conditions used. Low-irradiance reciprocity failure commenced at 0.1-1 s. Long wavelength sensitivity studies showed that the chem. sensitization generally enhanced the sensitivity of three spectral regions in the emulsions sensitized in

the absence of dye-550, 650 and 750 nm. These spectral regions are suggested to coincide with three distinct states of the sensitizer centers. Data for the emulsions chem. sensitized in the presence of dye were limited owing to the interference by dye absorption. The temp. dependence of the long wavelength sensitivity showed the activation energy for this process increased as the wavelength increased. Quantum sensitivity measurements were also made at the midpoint of the D-log E curve using 0.1 s exposures. Neglecting the polydisperse nature of these emulsions, values were 10-19 absorbed photons/grain for ***400*** - ***nm*** exposures and 13-27 absorbed photons/grain for spectral exposures. An energy-level diagram was constructed for the emulsions sensitized in the absence of dye using their measured activation energies and the photon energies of the three spectral regions. The 550 center is most likely a single-sulfide or single-selenide center, with an unknown gold content and provides a shallow electron trap (0.1 eV max. depth). The compns. of the 650 and 750 centers are most likely multiple sulfide or selenide or sulfide-selenide with unknown gold content. They provide deeper electron traps of depth 0.225-0.425 eV (650 center) and 0.45-0.65 (750 center), with the 650 center probably the dominant of the two in terms of concn.

- ST photog silver bromide emulsion latent image formation mechanism; silver bromide tabular grain photog latent image formation
- IT Activation energy
Electron traps
Photographic emulsions
Photographic sensitization
Photography
Photolysis
(mechanism of photog. latent-image formation in tabular AgBr grains chem. sensitized in presence and absence of spectral sensitizing dye)
- IT Photographic sensitizers
(spectral; mechanism of photog. latent-image formation in tabular AgBr grains chem. sensitized in presence and absence of spectral sensitizing dye)
- IT 333-20-0, Potassium thiocyanide 3878-44-2, Triphenylphosphine selenide 7757-83-7, Disodium sulfite 16903-35-8, Tetrachloroauric acid
RL: RGT (Reagent); RACT (Reactant or reagent)
(chem. sensitizer; mechanism of photog. latent-image formation in tabular AgBr grains chem. sensitized in presence and absence of spectral sensitizing dye)
- IT 7785-23-1, Silver bromide
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
(mechanism of photog. latent-image formation in tabular AgBr grains chem. sensitized in presence and absence of spectral sensitizing dye)
- IT ***39201-42-8*** 55425-23-5
RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(spectral sensitizer; mechanism of photog. latent-image formation in tabular AgBr grains chem. sensitized in presence and absence of spectral sensitizing dye)

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Charlier, E; J Imag Sci Technol 2000, V44, P235 CAPLUS
- (2) Daubendiek, R; US 5503971 1996 CAPLUS
- (3) Farnell, G; J Photogr Sci 1980, V28, P145 CAPLUS
- (4) Hailstone, R; Imag Sci J 2003, V51, P125 CAPLUS
- (5) Hailstone, R; Imag Sci J 2003, V51, P141 CAPLUS
- (6) Hailstone, R; Imag Sci J 2003, V51, P21 CAPLUS
- (7) Hailstone, R; Imag Sci J 2003, V51, P33 CAPLUS
- (8) Hailstone, R; Imag Sci J 2004, V52, P164 CAPLUS
- (9) Hailstone, R; J Imag Sci 1985, V29, P125 CAPLUS
- (10) Hailstone, R; J Imag Sci 1988, V32, P113 CAPLUS
- (11) Hailstone, R; J Imag Sci Technol 1993, V37, P61
- (12) Hailstone, R; J Imag Sci Technol 2001, V45, P76 CAPLUS
- (13) Hailstone, R; J Photogr Sci 1984, V32, P25 CAPLUS
- (14) Hailstone, R; J Soc Photogr Sci Technol Japan 1994, V57, P215 CAPLUS
- (15) Hailstone, R; Photogr Sci Eng 1983, V27, P152 CAPLUS
- (16) Kanzaki, H; J Phys Chem Solids 1994, V55, P631 CAPLUS
- (17) Kanzaki, H; J Phys Chem Solids 1997, V58, P221 CAPLUS
- (18) Kofron, J; US 4439520 1984 CAPLUS
- (19) Mifune, H; J Imag Sci Technol 2002, V46, P262 CAPLUS
- (20) Ohzeki, K; J Imag Sci Technol 1990, V34, P136 CAPLUS

- (21) Redfield, D; Photoinduced Defects in Semiconductors 1996, P22
- (22) Sutherns, E; J Photogr Sci 1960, V8, P118 CAPLUS
- (23) Tan, J; Imag Sci J 2003, V51, P255 CAPLUS
- (24) Tani, T; J Imag Sci Technol 1995, V39, P386 CAPLUS
- (25) Zou, C; J Imag Sci Technol 1995, V39, P106 CAPLUS

L11 ANSWER 2 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:632398 CAPLUS

DN 141:181888

ED Entered STN: 06 Aug 2004

TI Silver halide photographic material containing silver halide grain having multilayers of color-forming compound and non-color-forming compound

IN Hioki, Takanori; Suzuki, Makoto

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 70 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03C001-10

ICS G03C001-28

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004219784	A2	20040805	JP 2003-7809	20030116
PRAI	JP 2003-7809		20030116		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES		
	JP 2004219784	ICM	G03C001-10		
		ICS	G03C001-28		
	JP 2004219784	FTERM	2H023/CA05; 2H023/CA06; 2H023/CA10		
AB	Disclosed is the Ag halide photog. material contg. a Ag halide grain having multilayers of a compd. with a color-forming group and a compd. without a color-forming group on the surface for an improvement on sensitivity. The compd. without the color-forming group has the max. absorption peak .ltoreq. ***400*** ***nm***.				
ST	silver halide photog multilayer color forming compd				
IT	Photographic emulsions				
	(Ag halide photog. material contg. Ag halide grain having multilayers of color-forming compd. and non-color-forming compd.)				
IT	***63148-90-3***		***210482-95-4***	732245-76-0	732245-77-1
RL:	NUU (Other use, unclassified); USES (Uses)				
	(Ag halide photog. material contg. Ag halide grain having multilayers of color-forming compd. and non-color-forming compd.)				

L11 ANSWER 3 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:627646 CAPLUS

DN 142:102992

ED Entered STN: 05 Aug 2004

TI Photoelectron behavior of dye-sensitized AgBrI photographic material

AU Lai, Wei-dong; Zhao, Xiao-hui; Tian, Xiao-dong; Li, Xiao-wei; Fu, Guang-sheng

CS College of Physics Science and Technology, Hebei University, Baoding, 071002, Peop. Rep. China

SO Hebei Daxue Xuebao, Ziran Kexueban (2004), 24(3), 255-257

CODEN: HDXKEB; ISSN: 1000-1565

PB Hebei Daxue Bianjibu

DT Journal

LA Chinese

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

AB Microwave dielec. spectrum detection technol. (MDS) was used to detect photoelectron current of two AgBrI samples spectrally sensitized by different dyes, which were exposed by photon in the range of ***420*** -680 ***nm***. Results showed that intensity behavior of photoelectron currents was consistent with reflection absorption spectrum of dyes, and MDS could quickly detect the character of dyes in spectral sensitization.

ST photoelectron behavior dye sensitized silver bromide iodide photog material

IT Current density
(photoelec. current strength; photoelectron behavior of dye-sensitized AgBrI photog. material)

IT 33628-05-6 ***532993-87-6***
RL: MOA (Modifier or additive use); USES (Uses)
(photoelectron behavior of dye-sensitized AgBrI photog. material)

IT 155124-15-5, Silver bromide iodide
RL: TEM (Technical or engineered material use); USES (Uses)
(photoelectron behavior of dye-sensitized AgBrI photog. material)

L11 ANSWER 4 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:252077 CAPLUS

DN 140:294870

ED Entered STN: 26 Mar 2004

TI Optical recording medium and optical recording/reproducing method

IN Fukuzawa, Narutoshi; Horai, Takashi; Take, Hiroshi

PA Tdk Corporation, Japan

SO U.S. Pat. Appl. Publ., 11 pp.
CODEN: USXXCO

DT Patent

LA English

IC ICM G11B007-24

INCL 430270110

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004058274	A1	20040325	US 2003-657205	20030909
	JP 2004098542	A2	20040402	JP 2002-264973	20020911
PRAI	JP 2002-264973	A	20020911		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004058274	ICM	G11B007-24
	INCL	430270110
US 2004058274	NCL	430/270.110
JP 2004098542	FTERM	2H111/EA03; 2H111/EA12; 2H111/EA22; 2H111/EA32; 2H111/EA43; 2H111/EA48; 2H111/FA14; 2H111/FA30; 2H111/FB43; 2H111/FB63; 4H056/CA01; 4H056/CC02; 4H056/CC08; 4H056/CE03; 4H056/CE06; 4H056/DD03; 4H056/DD06; 4H056/DD19; 4H056/DD23; 4H056/FA06; 5D029/JA04; 5D029/JB28; 5D029/JB47; 5D029/JC05; 5D029/JC06; 5D090/AA01; 5D090/BB03; 5D090/CC01; 5D090/CC04; 5D090/DD02; 5D090/FF11; 5D090/KK06

AB The present invention provides an optical recording medium that includes a recording layer composed mainly of an org. compd. and can utilize blue-violet semiconductor laser light (***390*** to ***420*** ***nm*** in wavelength) as recording/reproducing laser light. The present invention also provides an optical recording/reproducing method using the optical recording medium. The optical recording medium comprises at least a supporting substrate; a recording layer on the supporting substrate, the recording layer contg. an org. compd. as a major component; and a light-transmitting layer on the recording layer, the light-transmitting layer being capable of transmitting laser light with a wavelength of ***390*** to ***420*** ***nm*** for recording and reproducing information. The org. compd. in the recording layer includes a trimethine cyanine dye that has the min. value n_{\min} of its refractive index n (real part of the complex refractive index) within the range of 370 to ***425*** ***nm*** and has a refractive index n of 1.2 or lower with respect to the wavelength of the recording/reproducing laser light. The org. compd., when absorbing the laser light, melts or degrades to bring about a change in the refractive index, thereby effecting recording of the information.

ST optical recording medium reproducing

IT Optical recording materials
(erasable; optical recording medium and optical recording/reproducing method)

IT Optical disks
(optical recording medium and optical recording/reproducing method)

IT Cyanine dyes
(optical recording medium and optical recording/reproducing method)

contg.)
IT ***905-96-4*** 3065-71-2 ***53213-80-2*** 675818-75-4
RL: PRP, (Properties); TEM (Technical or engineered material use); USES
(Uses)
(trimethine cyanine dye; optical recording medium and optical
recording/reproducing method contg.)

L11 ANSWER 5 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:417962 CAPLUS

DN 138:396173

ED Entered STN: 01 Jun 2003

TI Methods and means for influencing intercellular communication and
intercellular organelle transport, and use to test potential drug
substances

IN Gerdes, Hans-Hermann; Rustom, Amin

PA Germany

SO PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DT Patent

LA German

IC ICM G01N033-50

ICS G01N033-68

CC 1-1 (Pharmacology)

Section cross-reference(s): 9, 13

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003044524	A2	20030530	WO 2002-EP13140	20021122
	WO 2003044524	A3	20040212		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	DE 10157475	A1	20030618	DE 2001-10157475	20011123
	EP 1454136	A2	20040908	EP 2002-792793	20021122
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK			
	JP 2005509446	T2	20050414	JP 2003-546103	20021122
	US 2005064534	A1	20050324	US 2004-496126	20040716
PRAI	DE 2001-10157475	A	20011123		
	WO 2002-EP13140	W	20021122		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003044524	ICM	G01N033-50
	ICS	G01N033-68
WO 2003044524	ECLA	G01N033/50D2; G01N033/68R
JP 2005509446	FTERM	2G045/CB01; 2G045/FA16; 2G045/FB12; 2G045/FB13; 4B063/QA05; 4B063/QQ08; 4B063/QQ79; 4B063/QR77; 4B063/QS39; 4B063/QX02; 4C084/AA13; 4C084/AA17; 4C084/NA14; 4C084/ZA012; 4C084/ZA182; 4C084/ZA422; 4C084/ZB262; 4C084/ZB332; 4C084/ZB352; 4C084/ZB372; 4C084/ZC022; 4C084/ZC212; 4C084/ZC332
US 2005064534	NCL	435/040.500
	ECLA	G01N033/50D2; G01N033/68R

AB The invention discloses a method for investigation of intercellular communication and intercellular transport; whereby, after isolation, cells are investigated for membrane tubes which contain F-actin and myosin, have a diam. of 50- ***400*** ***nm***, are generally up to 50 .mu.m long or, in individual cases, longer, and which span between the cells. The invention further discloses a method in which the organelle transport between the cells is investigated. The methodol. of the invention may be carried out in the presence of a test substance, e.g. a potential therapeutic or pharmacol. active substance.

ST intercellular communication organelle transport drug screening; membrane tube F actin myosin intercellular communication organelle transport

IT Chromogranins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (B; methods for investigation of intercellular communication and
 intercellular organelle transport, and use in drug screening)

IT Actins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (F-; methods for investigation of intercellular communication and
 intercellular organelle transport, and use in drug screening)

IT Cytometry
 (FACS (fluorescence-activated cell sorting); methods for investigation
 of intercellular communication and intercellular organelle transport,
 and use in drug screening)

IT Histocompatibility antigens
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (HLA-A2; methods for investigation of intercellular communication and
 intercellular organelle transport, and use in drug screening)

IT Animal cell line
 (Hek 293; methods for investigation of intercellular communication and
 intercellular organelle transport, and use in drug screening)

IT Animal cell line
 (PC12; methods for investigation of intercellular communication and
 intercellular organelle transport, and use in drug screening)

IT Proteins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (VP22; methods for investigation of intercellular communication and
 intercellular organelle transport, and use in drug screening)

IT Vesicular stomatitis virus
 (VSVG; methods for investigation of intercellular communication and
 intercellular organelle transport, and use in drug screening)

IT Glycoproteins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (VSVG; methods for investigation of intercellular communication and
 intercellular organelle transport, and use in drug screening)

IT Myosins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (Va; methods for investigation of intercellular communication and
 intercellular organelle transport, and use in drug screening)

IT Agglutinins and Lectins
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (WGA; methods for investigation of intercellular communication and
 intercellular organelle transport, and use in drug screening)

IT Antibodies and Immunoglobulins
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (anti-tubulin; methods for investigation of intercellular communication
 and intercellular organelle transport, and use in drug screening)

IT Tubulins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (antibody to; methods for investigation of intercellular communication
 and intercellular organelle transport, and use in drug screening)

IT Infection
 (bacterial; methods for investigation of intercellular communication
 and intercellular organelle transport, and use in drug screening)

IT Drug targets
 (cell targeting; methods for investigation of intercellular
 communication and intercellular organelle transport, and use in drug
 screening)

IT Kidney
 (cell; methods for investigation of intercellular communication and
 intercellular organelle transport, and use in drug screening)

IT Peptides, biological studies
 Proteins
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (conjugates, with marker substances; methods for investigation of
 intercellular communication and intercellular organelle transport, and
 use in drug screening)

IT Proteins
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (cyan fluorescent, enhanced, VSVG-ECFP; methods for investigation of

intercellular communication and intercellular organelle transport, and use in drug screening)

IT Metabolism, animal
(disorder; methods for investigation of intercellular communication and intercellular organelle transport, and use in drug screening)

IT Farnesylation
(farnesylated EGFP; methods for investigation of intercellular communication and intercellular organelle transport, and use in drug screening)

IT Organelle
(filopodium; methods for investigation of intercellular communication and intercellular organelle transport, and use in drug screening)

IT Peptides, biological studies

Proteins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(fluorescent or luminescent; methods for investigation of intercellular communication and intercellular organelle transport, and use in drug screening)

IT Proteins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(green fluorescent, enhanced; methods for investigation of intercellular communication and intercellular organelle transport, and use in drug screening)

IT Brain
(hippocampus; methods for investigation of intercellular communication and intercellular organelle transport, and use in drug screening)

IT Parasite

Parasitocides
(infection; methods for investigation of intercellular communication and intercellular organelle transport, and use in drug screening)

IT Signal transduction, biological
(intercellular communication; methods for investigation of intercellular communication and intercellular organelle transport, and use in drug screening)

IT Organelle
(membrane tube; methods for investigation of intercellular communication and intercellular organelle transport, and use in drug screening)

IT Antibacterial agents

Anticholesteremic agents

Antihypertensives

Antitumor agents

Antiviral agents

Apparatus

Biological transport

Cell cycle

Cell membrane

Drug screening

Drugs

Dyes

Endocytosis

Fluorescence microscopy

Fluorescent dyes

Gene therapy

Human

Hypercholesterolemia

Hypertension

Light

Luminescent substances

Mental and behavioral disorders

Microscopes

Mitochondria

Mitosis

Neoplasm

Nervous system, disease

Nervous system agents

Pharmacology

Psychotropics

Transmission electron microscopy
(methods for investigation of intercellular communication and

intercellular organelle transport, and use in drug screening)

IT Myosins
Synaptophysin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(methods for investigation of intercellular communication and
intercellular organelle transport, and use in drug screening)

IT Radionuclides, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(methods for investigation of intercellular communication and
intercellular organelle transport, and use in drug screening)

IT Organelle
(secretory granule; methods for investigation of intercellular
communication and intercellular organelle transport, and use in drug
screening)

IT Medical goods
(therapeutic devices; methods for investigation of intercellular
communication and intercellular organelle transport, and use in drug
screening)

IT Organelle
(transport nanotube; methods for investigation of intercellular
communication and intercellular organelle transport, and use in drug
screening)

IT Organelle
(transport; methods for investigation of intercellular communication
and intercellular organelle transport, and use in drug screening)

IT Microscopy
(video; methods for investigation of intercellular communication and
intercellular organelle transport, and use in drug screening)

IT Infection
(viral; methods for investigation of intercellular communication and
intercellular organelle transport, and use in drug screening)

IT Proteins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(yellow fluorescent, enhanced; methods for investigation of
intercellular communication and intercellular organelle transport, and
use in drug screening)

IT 57-88-5, Cholesterol, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(methods for investigation of intercellular communication and
intercellular organelle transport, and use in drug screening)

IT 11078-21-0, Filipin 17466-45-4D, Phalloidin, conjugates with FITC or
TRITC 41085-99-8 47165-04-8, DAPI 76343-94-7, Latrunculin B
147963-22-2 148504-34-1, Calcein AM ***216982-34-2*** , DiO
220524-71-0
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(methods for investigation of intercellular communication and
intercellular organelle transport, and use in drug screening)

IT 7585-39-9D, .beta.-Cyclodextrin, Me ethers
RL: PAC (Pharmacological activity); BIOL (Biological study)
(methods for investigation of intercellular communication and
intercellular organelle transport, and use in drug screening)

L11 ANSWER 6 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:754712 CAPLUS
DN 137:286546
ED Entered STN: 04 Oct 2002
TI Optical data carrier containing xanthene dye as light-absorbing compound
in the information layer, the dyes and their preparation and use
IN Berneth, Horst; Bruder, Friedrich-Karl; Haese, Wilfried; Hagen, Rainer;
Hassenrueck, Karin; Kostromine, Serguei; Landenberger, Peter; Oser,
Rafael; Sommermann, Thomas; Stawitz, Josef-Walter; Bieringer, Thomas
PA Bayer Aktiengesellschaft, Germany
SO PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM G11B007-24
ICS C09B011-28; C07D311-82; C07D213-20
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)

Section cross-reference(s) : 41

FAN.CNT 15

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002077984	A1	20021003	WO 2002-EP3095	20020320
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE	10115227	A1	20021219	DE 2001-10115227	20010328
DE	10117462	A1	20021010	DE 2001-10117462	20010406
DE	10136063	A1	20030213	DE 2001-10136063	20010725
DE	10136064	A1	20030213	DE 2001-10136064	20010725
DE	10202571	A1	20030731	DE 2002-10202571	20020124
US	2002155381	A1	20021024	US 2002-102586	20020320
WO	2002086878	A2	20021031	WO 2002-EP3071	20020320
WO	2002086878	A3	20030227		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US	2003096192	A1	20030522	US 2002-102588	20020320
EP	1377974	A1	20040107	EP 2002-724250	20020320
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EP	1377975	A2	20040107	EP 2002-727443	20020320
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EP	1377978	A2	20040107	EP 2002-737887	20020320
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CN	1515002	A	20040721	CN 2002-810906	20020320
CN	1516872	A	20040728	CN 2002-810887	20020320
JP	2004523395	T2	20040805	JP 2002-575938	20020320
JP	2004524198	T2	20040812	JP 2002-584311	20020320
TW	223252	B1	20041101	TW 2002-91105381	20020320
JP	2004534344	T2	20041111	JP 2002-578290	20020320
US	2005042407	A1	20050224	US 2004-953235	20040929
PRAI	DE 2001-10115227	A	20010328		
	DE 2001-10117462	A	20010406		
	DE 2001-10136063	A	20010725		
	DE 2001-10136064	A	20010725		
	DE 2002-10202571	A	20020124		
	DE 2001-10117461	A	20010406		
	DE 2001-10117463	A	20010406		
	DE 2001-10117464	A	20010406		
	DE 2001-10124585	A	20010521		
	DE 2001-10140165	A	20010822		
	EP 2001-123810	A	20011004		
	EP 2001-130527	A	20011221		
	DE 2002-10200484	A	20020109		
	EP 2002-5505	A	20020311		
	US 2002-101793	A3	20020320		
	WO 2002-EP3071	W	20020320		
	WO 2002-EP3094	W	20020320		
	WO 2002-EP3095	W	20020320		

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2002077984	ICM	G11B007-24
	ICS	C09B011-28; C07D311-82; C07D213-20
WO 2002077984	ECLA	C07D217/14; C07D221/04B; C07D311/12; C07D311/80; C07D455/04; C07D491/04+311B+221B; C07F015/06B; C09B023/00S; C09B023/04; C09B023/10B; C09B029/00H2; C09B029/00H10; C09B029/36; C09B044/10; C09B047/04B; C09B047/08B; C09B047/26; C09B069/02; C09K009/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/249; G11B007/254; G11B007/26
DE 10115227	ECLA	C07D217/14; C07D221/04B; C07D311/12; C07D311/80; C07D455/04; C07D491/04+311B+221B; C07F015/06B; C09B023/00S; C09B023/04; C09B023/10B; C09B029/00H2; C09B029/00H10; C09B029/36; C09B044/10; C09B047/04B; C09B047/08B; C09B047/26; C09K009/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/249; G11B007/254; G11B007/26
DE 10117462	ECLA	C09B069/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/254; G11B007/26
DE 10136063	ECLA	C09B069/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/254; G11B007/26
DE 10136064	ECLA	C09B044/10; C09B069/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/254; G11B007/26
DE 10202571	ECLA	C09B069/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/254; G11B007/26
US 2002155381	NCL	430/270.150
	ECLA	C07D217/14; C07D221/04B; C07D311/12; C07D311/80; C07D455/04; C07D491/04+311B+221B; C07F015/06B; C09B023/00S; C09B023/04; C09B023/10B; C09B029/00H2; C09B029/00H10; C09B029/36; C09B044/10; C09B047/04B; C09B047/08B; C09B047/26; C09K009/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/249; G11B007/254; G11B007/26
WO 2002086878	ECLA	C07D217/14; C07D221/04B; C07D311/12; C07D311/80; C07D455/04; C07D491/04+311B+221B; C07F015/06B; C09B023/00S; C09B023/04; C09B023/10B; C09B029/00H2; C09B029/00H10; C09B029/36; C09B044/10; C09B047/04B; C09B047/08B; C09B047/26; C09K009/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/249; G11B007/254; G11B007/26
US 2003096192	NCL	430/270.150
	ECLA	C07D217/14; C07D221/04B; C07D311/12; C07D311/80; C07D455/04; C07D491/04+311B+221B; C07F015/06B; C09B023/00S; C09B023/04; C09B023/10B; C09B029/00H2; C09B029/00H10; C09B029/36; C09B044/10; C09B047/04B; C09B047/08B; C09B047/26; C09B069/02; C09K009/02; G11B007/0045R; G11B007/24; G11B007/244; G11B007/247; G11B007/248; G11B007/249; G11B007/254; G11B007/26
JP 2004523395	FTERM	2H111/EA03; 2H111/EA37; 2H111/EA39; 2H111/FA01; 2H111/FA11; 2H111/FA12; 2H111/FA14; 2H111/FA15; 2H111/FB42
JP 2004524198	FTERM	2H111/EA03; 2H111/EA12; 2H111/EA22; 2H111/EA32; 2H111/FA01; 2H111/FA12; 2H111/FA14; 2H111/FA21; 2H111/FA37; 2H111/FB42; 2H111/FB43; 2H111/FB46; 2H111/FB50; 2H111/GA02; 2H111/GA07; 5D029/JA04; 5D029/JC01; 5D121/AA01; 5D121/AA03; 5D121/JJ07
JP 2004534344	FTERM	2H111/EA03; 2H111/EA12; 2H111/EA22; 2H111/EA25; 2H111/EA32; 2H111/EA43; 2H111/FA01; 2H111/FA14; 2H111/FA15; 2H111/FA21; 2H111/FB44; 2H111/FB45; 2H111/GA02; 2H111/GA03; 2H111/GA07; 4H056/CA01; 4H056/CA02; 4H056/CC05; 4H056/CC08; 4H056/CD05; 4H056/CE03; 4H056/CE07; 4H056/DD03; 4H056/DD07; 4H056/DD15; 4H056/DD19; 4H056/DD29; 5D029/JA04; 5D029/JB28; 5D029/JB46; 5D029/JB47; 5D029/LA02; 5D029/LA11; 5D029/LB07; 5D029/LB12; 5D029/LB17; 5D029/LC08; 5D121/AA01; 5D121/AA04; 5D121/EE02; 5D121/EE03; 5D121/EE22
US 2005042407	NCL	428/064.400
	ECLA	C07D217/14; C07D221/04B; C07D311/12; C07D311/80; C07D455/04; C07D491/04+311B+221B; C07F015/06B; C09B023/00S; C09B023/04; C09B023/10B; C09B029/00H2; C09B029/00H10; C09B029/36; C09B044/10; C09B047/04B;

OS MARPAT 137:286546

AB The invention relates to an optical data carrier contg. a preferably transparent substrate which has optionally been coated with at least one reflection layer. An information layer which can be written with light, optionally at least one reflection layer and optionally a protective layer or another substrate or a covering layer are applied to the surface of the substrate. The data carrier can be written and read with blue or red light, preferably laser light. The information layer contains at least one xanthene dye contg. at least two anionic groups and having, as a counterion, at least one cation contg. at least one conjugated .pi.-system having at least 6 .pi.-electrons as a light-absorbing compd.; the layer optionally contains a binding agent. The dye cation cannot be benzyltrimethylammonium, benzyltriethylammonium, tetraphenylphosphonium, butyltriphenylphosphonium and ethyltriphenylphosphonium. The xanthene dye has an absorption max. of ***420*** -650 ***nm***. The dyes, their prepn. and use, and the prepn. of the optical data carrier are also claimed.

ST optical data carrier disk xanthene dye light absorber

IT Optical ROM disks

(optical data carriers contg. xanthene dyes as light-absorbing compd. in information recording layer)

IT Dyes

(xanthene; prepn. of xanthene dyes and use as light-absorbing compd. in information layer of optical data carriers)

IT 465544-25-6P 465544-27-8P 465544-28-9P 465544-29-0P 465544-30-3P
465544-31-4P 465544-32-5P 465544-34-7P 465544-35-8P 465544-36-9P
465544-37-0P 465544-39-2P 465544-41-6P 465544-42-7P 465544-43-8P
465544-44-9P 465544-46-1P 465544-47-2P 465544-49-4P 465544-51-8P
465544-52-9P 465544-54-1P 465544-56-3P 465544-59-6P 465544-61-0P
465544-63-2P 465544-64-3P 465544-67-6P 465547-82-4P 465547-83-5P
465547-85-7P 465547-86-8P 465547-88-0P 465547-89-1P
465547-91-5P

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(prepn. of xanthene dyes and use as light-absorbing compd. in information layer of optical data carriers)

IT 1282-37-7, Ferrocenium tetrafluoroborate 465544-24-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of xanthene dyes and use as light-absorbing compd. in information layer of optical data carriers)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Ciba Geigy Ag; EP 0805441 A 1997 CAPLUS
- (2) Ciba Geigy Ag; EP 0805441 A 1997 CAPLUS
- (3) Edward Gurr Ltd; GB 1057594 A 1967 CAPLUS
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- (5) Ici Plc; EP 0542420 A 1993 CAPLUS
- (6) Ici Plc; EP 0542420 A 1993 CAPLUS
- (7) Neckers, D; US 4924009 A 1990 CAPLUS
- (8) Neckers, D; US 4924009 A 1990 CAPLUS
- (9) Sato, T; US 4656121 A 1987 CAPLUS
- (10) Sato, T; US 4656121 A 1987 CAPLUS
- (11) Wariishi, K; US 6020105 A 2000 CAPLUS
- (12) Wariishi, K; US 6020105 A 2000 CAPLUS

L11 ANSWER 7 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:689919 CAPLUS

DN 137:239636

ED Entered STN: 12 Sep 2002

TI Silver halide color photographic films and method for color image formation using the same

IN Kawai, Kiyoshi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 46 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03C001-035

ICS G03C001-46; G03C007-18; G03C007-20; G03C007-305; G03C007-413

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002258426	A2	20020911	JP 2001-55422	20010228
PRAI	JP 2001-55422		20010228		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2002258426	ICM	G03C001-035
	ICS	G03C001-46; G03C007-18; G03C007-20; G03C007-305; G03C007-413

AB The title photog. film has coupler-contg. silver halide emulsion layers of ***400*** -490 ***nm*** max. spectral sensitivity, .gtoreq.3 coupler-contg. silver halide emulsion layers of 500-600 nm max. spectral sensitivity, coupler-contg. silver halide emulsion layers of 600-790 nm max. spectral sensitivity, and light-insensitive layers on a support, wherein the coupler-contg. silver halide emulsion layers of 500-600 nm max. spectral sensitivity has a layer of which av. grain diam. is the smallest among the layers and a layer of which av. grain diam. is larger than the av. grain diameter of the smallest diam. layer and disposed in both sides of the smallest grain diam. layer and wherein the light-insensitive layer is not disposed at closer to the support than the coupler-contg. silver halide emulsion layers of 600-790 nm max. spectral sensitivity. The film provides the good image quality under various exposure light conditions and the images of the high color reprodn. and the sharpness.

ST silver halide color photog film image

IT Photographic couplers

Photographic emulsions

Photographic films

(silver halide color photog. films and method for color image formation using same)

IT 903-19-5 1330-78-5, Tricresyl phosphate 36753-13-6 57583-54-7
65206-18-0 76379-53-8 92991-05-4 93927-28-7 98835-00-8
99119-46-7 100780-57-2 104166-82-7 104335-45-7 ***106518-55-2***
113436-96-7 121071-23-6 142086-32-6 154444-44-7
155124-15-5, Silver bromide iodide ***166444-20-8*** 172903-19-4
189702-75-8 ***224314-59-4*** 457892-98-7

RL: TEM (Technical or engineered material use); USES (Uses)

(coupler-contg. silver halide emulsion layers of 500-600 nm max. spectral sensitivity in photog. films)

L11 ANSWER 8 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:387561 CAPLUS

DN 136:393191

ED Entered STN: 23 May 2002

TI High sensitive color photographic material containing spectral absorption-controlled silver halide grains

IN Sakurada, Masami; Morimoto, Kiyoshi; Ueda, Fuminori; Yamada, Toru

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 81 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03C007-20

ICS G03C001-015; G03C001-28; G03C001-38; G03C001-74; G03C007-36; G03C007-388

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002148767	A2	20020522	JP 2001-193596	20010626
	JP 2002287309	A2	20021003	JP 2001-159605	20010528
	CN 1340739	A	20020320	CN 2001-130859	20010828
	US 2002177087	A1	20021128	US 2001-939843	20010828
	US 6610466	B2	20030826		
PRAI	JP 2000-258159	A	20000828		
	JP 2001-9548	A	20010117		
	JP 2001-193596	A	20010626		

CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

JP 2002148767 ICM G03C007-20
ICS G03C001-015; G03C001-28; G03C001-38; G03C001-74;
G03C007-36; G03C007-388

US 2002177087 NCL 430/505.000
ECLA G03C001/12; G03C007/30L; G03C007/30M; G03C007/30S;
G03C007/388

OS MARPAT 136:393191

AB The material has .gtoreq.1 layer contg. an emulsion manufd. by mixing Ag halide dispersions with light absorption intensity (A) .gtoreq.60 at spectral absorption max. wavelength (B) <500 nm or with A .gtoreq.100 at B .gtoreq.500 nm and emulsified dispersions. The emulsion shows spectral absorption area intensity change .ltoreq.10% at ***400*** -700 ***nm*** when stirred at 40.degree. for 30 min or when aged at 60.degree. and 30% humidity for 3 days. The material having each .gtoreq.2 red-, green-, and blue-sensitive layers with different sensitivity, in which .gtoreq.1 higher sensitive layer (C) of them, contg. the obtained emulsion, is characterized by that sensitivity of a lower sensitive emulsion layer adjacent to the layer C is .gtoreq.60% of that of the layer C or by that total Ag content is 0.1-7.0 g/m2. Sensitizing dyes are stably adsorbed on the Ag halide grains even when org. solvents are contained.

ST photog emulsion spectral absorption sensitizing dye; emulsion dispersion surfactant org solvent coupler

IT Photographic emulsions
(silver halide photog.emulsion with controlled spectral absorption)

IT 54942-74-4 95050-16-1 96514-07-7
RL: MOA (Modifier or additive use); USES (Uses)
(coupler; photog. emulsion manufd. by mixing with dispersion contg. org. solvent, surfactant, or coupler)

IT 84-74-2, Dibutyl phthalate 2528-39-4, Trihexyl phosphate
RL: MOA (Modifier or additive use); USES (Uses)
(photog. emulsion manufd. by mixing with dispersion contg. org. solvent, surfactant, or coupler)

IT 317816-59-4 381677-20-9 427901-08-4 427901-09-5 427901-10-8
427901-11-9 427901-12-0 427901-13-1 ***427901-14-2***
427901-15-3
RL: TEM (Technical or engineered material use); USES (Uses)
(sensitizing dye; photog. emulsion contg. silver halide grain with multiple sensitizing dye-adsorbed layers)

IT 577-11-7 1323-19-9 111763-27-0
RL: MOA (Modifier or additive use); USES (Uses)
(surfactant; photog. emulsion manufd. by mixing with dispersion contg. org. solvent, surfactant, or coupler)

L11 ANSWER 9 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:760361 CAPLUS

DN 135:310833

ED Entered STN: 19 Oct 2001

TI Silver halide emulsion containing super sensitizer, photographic film and photothermographic material using it

IN Ikemizu, Hiroshi; Kagawa, Nobuaki

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 63 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03C001-498

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001290236	A2	20011019	JP 2000-103237	20000405
PRAI JP 2000-103237		20000405		

CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

JP 2001290236 ICM G03C001-498

OS MARPAT 135:310833

AB The emulsion contains .gtoreq.1 Het1[J1T1SC(NRaRb):N+RcRd]n1.M1k1 (I; Het1 = Ag halide adsorbing group except arom. hydrocarbon and arom. heterocycle; T1 = bivalent linkage comprising an aliph. hydrocarbon group or a bond; J1 = .gtoreq.1 O, S, or N-contg. bivalent linkage or the bond; Ra, Rb, Rc, Rd = H, acyl, aliph. hydrocarbon, aryl, heterocycle, atoms except C, substituent with atoms except C as a linkage; Ra and Rb, Rc and Rd, Ra and Rc, or Rb and Rd may form a N-contg. heterocycle; n1 = 1-3; M1 = charge neutralizing ion; k1 = the no. of the charge neutralizing ion), Het2[J2T2SC(NRaRb):N+RcRd]n2.M2k2 (II; Het2 = substituent; T2 = T1; J2 = J1; Ra, Rb, Rc, Rd = H, acyl, aliph. hydrocarbon, aryl, heterocycle, substituent with atoms except C as the linkage; Ra and Rb, Rc and Rd, Ra and Rc, or Rb and Rd may form the N-contg. heterocycle; n2 = n1; M2 = M1; k2 = k1), or Het3[J3T3OC(NRaRb):N+RcRd]n3.M3k3 (III; Het3 = substituent; T3 = T1; J3 = J1; Ra, Rb, Rc, Rd = the same as those of I; Ra and Rb, Rc and Rd, Ra and Rc, or Rb and Rd may form the N-contg. heterocycle; n3 = n1; M3 = M1; k3 = k1). The photothermog. material has an image forming layer contg. an org. Ag salt, a photosensitive Ag halide grain or its component, a reducing agent, and .gtoreq.1 of I, II, and III on a support. The photog. emulsion contains Het4[J4T4SC(NRaRb):N+RcRd]n4.M4k4 (Het4 = arom. hydrocarbon, arom. heterocycle; T4 = T1; J4 = J1; Ra, Rb, Rc, Rd = the same as those of I; Ra and Rb, Rc and Rd, Ra and Rc, or Rb and Rd may form the N-contg. heterocycle; n4 = n1; M4 = M1; k4 = k1) and spectrally sensitized at ***400*** -700 ***nm*** by a sensitizing dye. The Ag halide photog. material has an emulsion layer contg. the above emulsion on a support. Those materials showed high sensitivity at blue to IR region and reduced sensitivity change due to exposure variation.

ST photog emulsion aminium super sensitizer; photothermog material aminium super sensitizer

IT Photographic emulsions
(photog. emulsion contg. aminium compd. super sensitizer)

IT Photographic films
(photog. film using silver halide emulsion contg. aminium compd. super sensitizer)

IT Photothermographic copying
(photothermog. material using silver halide emulsion contg. aminium compd. super sensitizer)

IT Photographic sensitizers
(supersensitizers; photog. emulsion contg. aminium compd. super sensitizer)

IT 367277-77-8 367277-78-9 367277-80-3 367277-81-4 367277-83-6
367277-84-7 367277-85-8 367277-86-9 367277-87-0
RL: DEV (Device component use); USES (Uses)
(photog. emulsion contg. aminium compd. super sensitizer)

IT ***65293-95-0*** 75260-71-8 138450-96-1 252988-64-0 327156-72-9
327156-74-1
RL: DEV (Device component use); USES (Uses)
(sensitizing dye; photog. emulsion contg. aminium compd. super sensitizer)

L11 ANSWER 10 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:709909 CAPLUS

DN 135:280428

ED Entered STN: 28 Sep 2001

TI Silver halide color photographic material of which colors are controlled on base of Macbeth chart

IN Hioki, Katsuhiko

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 45 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03C007-20
ICS G03C001-035; G03C001-74; G03C007-18; G03C007-305

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001264942	A2	20010928	JP 2000-70295	20000314
PRAI	JP 2000-70295		20000314		
CLASS	PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES				

JP 2001264942 ICM G03C007-20

ICS G03C001-035; G03C001-74; G03C007-18; G03C007-305

AB The material has each .gtoreq.2 red-, green-, and blue-sensitive layers and light insensitive layers on one side of a support, is characterized by the following conditions: (1) total of chroma of each blue, green, red, yellow, magenta, cyan patch on a print is .gtoreq.330, which is obtained by photographing Macbeth chart (24 patch) at 4800 K, developing, and printing; (2) total of color difference between each 18 colored patch original except neutral gray and hue angle is .ltoreq.120, where each color is defined by CIE 1976 L*a*b* color space and there are the following relationships between chroma (C*ab) and hue angle (hab): $C^*ab = (a^2 + b^2)^{1/2}$ and $hab = \arctan(b^*/a^*)$. The material is also claimed, characterized by satisfying the following conditions: (a) .lambda.R = 600-680 nm (.lambda.R = barycentric wavelength of optical sensitivity distribution of .gtoreq.1 red-sensitive layer); (b) .lambda.G = 500-580 nm (.lambda.G = barycentric wavelength of optical sensitivity distribution of .gtoreq.1 green-sensitive layer); (c) .lambda.B = ***400*** -480 ***nm*** (.lambda.B = barycentric wavelength of optical sensitivity distribution of .gtoreq.1 blue-sensitive layer); (d) 500 nm < .lambda.-R < 560 nm (.lambda.-R = barycentric wavelength of optical sensitivity distribution of interimage effect magnitude of the red-sensitive layer effected by the other layer at 500-600 nm); (e) .lambda.G - .lambda.-R .gtoreq.10 ***nm*** ; (f) ***400*** ***nm*** < .lambda.-G1 < 460 nm (.lambda.-G1 = barycentric wavelength of optical sensitivity distribution of interimage effect magnitude of the green-sensitive layer effected by the other layer at ***400*** -500 ***nm***); or (f') 620 nm < .lambda.-G2 < 700 nm (.lambda.-G2 = barycentric wavelength of optical sensitivity distribution of interimage effect magnitude of the green-sensitive layer effected by the other layer at 600-700 nm); and (g) .lambda.B - .lambda.-G1 .gtoreq.10 nm; or (g') .lambda.R - .lambda.-G2 .ltoreq.-10 nm;. It shows improved color and image reprodn. quality and Ag bleaching, preventing fog due to natural radiation.

ST photog emulsion chromatics hue angle; interimage effect photog film; barycentric wavelength spectral sensitivity distribution photog

IT Photographic films

(photog. film with controlled chromatics, hue angle, spectral sensitivity distribution barycentric wavelength, or interimage effect)

IT 80567-35-7 125981-35-3 161321-92-2 261638-80-6

RL: DEV (Device component use); USES (Uses)

(DIR coupler; photog. film with controlled chromatics, hue angle, spectral sensitivity distribution barycentric wavelength, or interimage effect)

IT 7440-22-4, Silver, uses

RL: DEV (Device component use); USES (Uses)

(colloidal; photog. film with controlled chromatics, hue angle, spectral sensitivity distribution barycentric wavelength, or interimage effect)

IT 27268-50-4 33628-08-9 59137-43-8 68392-94-9 92745-88-5

139536-86-0 148647-43-2 161710-77-6 199338-28-8

207274-77-9

RL: DEV (Device component use); USES (Uses)

(sensitizing dye; photog. film with controlled chromatics, hue angle, spectral sensitivity distribution barycentric wavelength, or interimage effect)

L11 ANSWER 11 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:513400 CAPLUS

DN 133:142563

ED Entered STN: 28 Jul 2000

TI Fragmentable electron donor compounds with broad blue spectral sensitization

IN Reed, Kenneth J.; Pepe, Joseph P.; Friday, James A.; Eikenberry, Jon N.; Chang, Yun C.; Muentner, Annabel A.; Lenhard, Jerome R.

PA Eastman Kodak Company, USA

SO Eur. Pat. Appl., 84 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM G03C001-10

ICS G03C001-29

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other

Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1022609	A1	20000726	EP 2000-200164	20000117
	EP 1022609	B1	20050810		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6509144	B1	20030121	US 1999-236821	19990125
	JP 2000221628	A2	20000811	JP 2000-17928	20000124
PRAI	US 1999-236821	A	19990125		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1022609	ICM	G03C001-10
	ICS	G03C001-29
EP 1022609	ECLA	G03C001/10; G03C001/29
US 6509144	NCL	430/567.000; 430/569.000; 430/572.000; 430/574.000; 430/577.000; 430/578.000; 430/580.000; 430/581.000; 430/583.000; 430/586.000; 430/600.000
	ECLA	G03C001/10; G03C001/29

OS MARPAT 133:142563

AB This invention comprises a photog. element comprising a support and .gtoreq.1 blue sensitive Ag halide emulsion layer contg. a tabular grain Ag halide emulsion, or an emulsion in which the halide content is at least 50% chloride and .ltoreq.5% iodide, wherein the emulsion is spectrally sensitized with .gtoreq.1 dye providing a peak sensitization between 446 and 500 nm and .gtoreq.1 dye providing a peak sensitization between ***400*** and 445 ***nm*** and addnl. sensitized with a fragmentable electron donor of the formula: X-Y'. Or an electron donor which contains an -XY' moiety; wherein X is an electron donor moiety, Y' is a leaving proton H or a leaving group Y, with the proviso that if Y' is H a base, .beta.-, is covalently linked directly or indirectly to X. And wherein: (1) X-Y' has an oxidn. potential between 0 and .apprx.1.4 V; and (2) the oxidized form of X-Y' fragments to give the radical X.bul. and the leaving fragment Y'; and, optionally, (3) the radical X.bul. has an oxidn. potential .gtoreq.-0.7V (i.e., equal to or more neg. than .apprx.-0.7V).

ST fragmentable electron donor broad blue spectral sensitization

IT Electron donors
Oxidation potential
Photographic couplers
Photographic emulsions
Photographic films
Photographic sensitization
(photog. element having support and silver halide emulsion layer contg. fragmentable electron donor compds. with blue spectral sensitization)

IT 149-45-1, Disodium 4,5-Dihydroxy-1,3-benzenedisulfonate

RL: RCT (Reactant); RACT (Reactant or reagent)

(18photog. element having support and silver halide emulsion layer contg. fragmentable electron donor compds. with blue spectral sensitization)

IT 61600-15-5 93966-57-5

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(fragmentable electron donor compds. with blue spectral sensitization in silver halide photog. element contg. UV filter layer of)

IT 23568-98-1 51599-31-6 65749-35-1 102604-67-1 165662-39-5

220039-40-7

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(fragmentable electron donor compds. with blue spectral sensitization in silver halide photog. element contg. cyan layer of)

IT 167684-63-1 168689-49-4 264873-87-2

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(fragmentable electron donor compds. with blue spectral sensitization in silver halide photog. element contg. fast yellow layer of)

IT 30818-18-9 ***52049-36-2*** 65293-90-5 150779-67-2 279686-46-3

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(fragmentable electron donor compds. with blue spectral sensitization in silver halide photog. element contg. magenta layer of)

IT 903-19-5 130016-98-7
 RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
 (fragmentable electron donor compds. with blue spectral sensitization in silver halide photog. element contg. yellow filter layer of)

IT 60247-61-2 217439-60-6
 RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)
 (photog. element having silver halide emulsion layer contg. fragmentable electron donor compds. and gelatin support coated with yellow-forming couplers)

IT 26750-50-5, Bis(vinylsulfonylmethyl)ether
 RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)
 (photog. element having silver halide emulsion layer contg. fragmentable electron donor compds. with blue spectral sensitization on gelatin support hardened with)

IT 55526-96-0 60507-44-0 67132-51-8 106392-12-5, PLURONIC 31R1
 119342-48-2 130017-19-5 141766-84-9 143727-19-9 172210-73-0
 207232-04-0 210584-95-5
 RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)
 (photog. element having support and silver halide emulsion layer contg. fragmentable electron donor compds. with blue spectral sensitization)

IT 194229-62-4 194287-95-1 194294-24-1 219807-83-7 220065-67-8
 224294-14-8 275824-42-5
 RL: NUU (Other use, unclassified); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
 (photog. element having support and silver halide emulsion layer contg. fragmentable electron donor compds. with blue spectral sensitization)

IT 263406-35-5
 RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
 (photog. element having support and silver halide emulsion layer contg. fragmentable electron donor compds. with blue spectral sensitization)

IT 15002-31-0, Tetrapotassium hexacyanoruthenate(4-)
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (photog. element having support and silver halide emulsion layer contg. fragmentable electron donor compds. with blue spectral sensitization)

IT 155124-15-5, Silver bromide iodide
 RL: TEM (Technical or engineered material use); USES (Uses)
 (photog. element having support and silver halide emulsion layer contg. fragmentable electron donor compds. with blue spectral sensitization)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

- RE
- (1) Kodak; US 5576157 A CAPLUS
 - (2) Kodak; US 5747236 A CAPLUS
 - (3) Kodak; EP 0677782 A 1995 CAPLUS
 - (4) Kodak; EP 0786691 A 1997 CAPLUS

L11 ANSWER 12 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:686595 CAPLUS

DN 131:315907

ED Entered STN: 28 Oct 1999

TI Radiographic product exhibiting reduced dye stain

IN Friour, Gerard A.; Thomas, Francoise M.

PA Eastman Kodak Company, USA

SO U.S., 16 pp., Cont.-in-part of U.S. Ser..No. 565,496, abandoned.

CODEN: USXXAM

DT Patent

LA English

IC ICM G03C001-14

ICS G03C001-815

INCL 430583000

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 5972590	A	19991026	US 1997-811751	19970306
PRAI	US 1995-565496	B2	19951130		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5972590	ICM	G03C001-14
	ICS	G03C001-815
	INCL	430583000
US 5972590	NCL	430/583.000; 430/139.000; 430/567.000; 430/933.000; 430/966.000
	ECLA	G03C001/16; G03C001/815C
OS	MARPAT 131:315907	
AB	<p>The present invention concerns silver halide photog. products that are assocd. with x-ray intensifying screens and used in radiog. More precisely, the invention concerns with a radiog. system contg. at least one layer of spectrally sensitized tabular grain silver halide emulsion and an intensifying screen. A radiog. product is described which makes it possible to obtain an image with no residual yellow coloring. The radiog. product comprises .gtoreq.1 photosensitive Ag halide tabular grain emulsion spectrally sensitized with a spectral sensitizing dye in the blue region having an emission peak between ***400*** and 500 ***nm***, and an optical brightener derived from 4,4'-diamino-stilbene di-sulfonic acid having .gtoreq.3 anionic sulfo groups, put in the photosensitive layer of the radiog. products or in .gtoreq.1 layer situated between the photo-sensitive layer and the support. The radiog. product is applicable to radiog. systems including 1 or 2 intensifying screens.</p>	
ST	radiog optical brightener Phorwite Tinopal monomethine cyanine dye stain; x ray film diaminostilbene disulfonic acid spectral sensitizer	
IT	<p>Polyesters, uses</p> <p>RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)</p> <p>(Estar; x-ray film exhibiting reduced dye stain contg. film support made of)</p>	
IT	<p>Cyanine dyes</p> <p>(monomethine; x-ray film contg. spectral sensitizers and optical brighteners for reduced dye stain)</p>	
IT	<p>Fluorescent brighteners</p> <p>(optical brightener for emulsion layer of x-ray film exhibiting reduced dye stain)</p>	
IT	<p>Photographic sensitizers</p> <p>Radiographic films</p> <p>Radiography</p> <p>(x-ray film contg. spectral sensitizers and optical brighteners for reduced dye stain)</p>	
IT	<p>Polyesters, uses</p> <p>RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)</p> <p>(x-ray film exhibiting reduced dye stain contg. film support made of)</p>	
IT	<p>86271-35-4</p> <p>RL: MOA (Modifier or additive use); USES (Uses)</p> <p>(Phorwite; optical brightener for emulsion layer of x-ray film exhibiting reduced dye stain)</p>	
IT	<p>41098-56-0</p> <p>RL: MOA (Modifier or additive use); USES (Uses)</p> <p>(Tinopal; optical brightener for emulsion layer of x-ray film exhibiting reduced dye stain)</p>	
IT	<p>23729-34-2, WIT 2020</p> <p>RL: MOA (Modifier or additive use); USES (Uses)</p> <p>(WIT 2020; optical brightener for emulsion layer of x-ray film exhibiting reduced dye stain)</p>	
IT	<p>26750-50-5, Bis(vinylsulfonylmethyl)ether</p> <p>RL: RCT (Reactant); RACT (Reactant or reagent)</p> <p>(hardening agent for x-ray film exhibiting reduced dye stain)</p>	
IT	<p>247578-58-1 247578-59-2</p> <p>RL: MOA (Modifier or additive use); USES (Uses)</p> <p>(optical brightener for emulsion layer of x-ray film exhibiting reduced dye stain)</p>	
IT	<p>63149-36-0 67132-50-7 68019-06-7 98255-00-6 161710-77-6 178744-22-4 178744-23-5 178744-24-6 178744-25-7 ***247578-57-0***</p> <p>RL: MOA (Modifier or additive use); USES (Uses)</p> <p>(spectral sensitizing dye for x-ray film exhibiting reduced dye stain)</p>	
IT	<p>7785-23-1, Silver bromide</p> <p>RL: TEM (Technical or engineered material use); USES (Uses)</p> <p>(x-ray film exhibiting reduced dye stain and contg. spectrally sensitized tabular grain of)</p>	

IT 25038-59-9, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(x-ray film exhibiting reduced dye stain contg. film support made of)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; Reasearch Disclosure 1983, V231, P249
- (2) Daubendiek; US 4639411 1987 CAPLUS
- (3) Hoyer; US 5238793 1993 CAPLUS
- (4) Ishikawa; US 4587195 1986 CAPLUS
- (5) Kuse; US 4232112 1980 CAPLUS
- (6) McFall; US 2933390 1960 CAPLUS
- (7) Sugimoto; US 4609621 1986
- (8) Van Doorselaer; US 4130428 1978 CAPLUS

L11 ANSWER 13 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:645358 CAPLUS

DN 132:42668

ED Entered STN: 11 Oct 1999

TI Hole trapping in mixed benzoxazolo-benzimidazolo carbocyanine spectral sensitized AgBrI (111) tabular microcrystals

AU De Keyzer, R.; Callant, P.

CS Agfa-Gevaert N. V., Mortsel, 2640, Belg.

SO International Symposium on Silver Halide Imaging: Recent Advances and Future Opportunities in Silver Halide Imaging, Final Program and Proceedings of IS&T/SPSTJ's, Victoria, B. C., Oct. 27-30, 1997 (1997), 85-87 Publisher: Society for Imaging Science and Technology, Springfield, Va.

CODEN: 68GFA7

DT Conference

LA English

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

AB The optical and photog. behavior was investigated of J-aggregated benzoxazolo carbocyanine dyes (D1 and D2) in the presence of low surface concns. of benzimidazolo carbocyanine dyes (S1 and S2). Diffuse reflectance spectra of the emulsions and the coatings (DRS) and photog. sensitivity on ***405*** ***nm*** and 535 ***nm*** were examd. as a function of concn. of the supersensitizing dye and the dye structure on primitive AgBrI (111) tabular crystals. In the absence of the supersensitizing dye a large degree of intrinsic as well as spectral desensitization is detected for dye 1 and 2. The addn. of 1 % of the supersensitizing dye (relative to the spectral sensitizer) increases sharply the intrinsic and spectral sensitivity without major changes in the optical absorption spectra of the emulsion. Our expts. confirm the importance of supersensitization through energy transfer mechanism but also that one has to take into account a decrease of recombination on trapped holes on the supersensitizer after electron injection in the conduction band.

ST hole trapping carbocyanine spectral sensitizer tabular microcrystal photog emulsion; benzoxazole benzimidazole carbocyanine sensitizer supersensitizer photog emulsion hole trapping

IT Absorption spectra
Hole traps
Ionic conductivity
J-aggregates
Photographic sensitizers
Photoinduced energy transfer
(optical and photog. behavior of J-aggregated benzoxazolo carbocyanine sensitizers in presence of low surface concns. of benzimidazolo carbocyanine supersensitizers)

IT Photographic sensitizers
(supersensitizers; optical and photog. behavior of J-aggregated benzoxazolo carbocyanine sensitizers in presence of low surface concns. of benzimidazolo carbocyanine supersensitizers)

IT 151918-31-9, Silver bromide iodide (AgBr0.99I0.01)
RL: TEM (Technical or engineered material use); USES (Uses)
(optical and photog. behavior of J-aggregated benzoxazolo carbocyanine sensitizers in presence of low surface concns. of benzimidazolo carbocyanine supersensitizers)

IT ***39201-42-8*** ***121689-94-9***
RL: PRP (Properties); TEM (Technical or engineered material use); USES

(Uses)
(spectral sensitizer; optical and photog. behavior of J-aggregated
benzoxazolo carbocyanine sensitizers in presence of low surface concns.
of benzimidazolo carbocyanine supersensitizers)

IT 28272-54-0 63148-91-4
RL: PRP (Properties); TEM (Technical or engineered material use); USES
(Uses)
(supersensitizer; optical and photog. behavior of J-aggregated
benzoxazolo carbocyanine sensitizers in presence of low surface concns.
of benzimidazolo carbocyanine supersensitizers)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
(1) Berriman, R; Phot Sci Eng 1973, V17(2), P235 CAPLUS
(2) Muentner, A; IST 50 th Annual Congress Proceedings
(3) Siegel, J; IST 50 th Annual Congress Proceedings P117
(4) Simson; Phot Sci Eng 1975, V19, P339 CAPLUS
(5) Tani, T; J Phys Chem 1992, V96, P2778 CAPLUS

L11 ANSWER 14 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:535537 CAPLUS

DN 131:293189

ED Entered STN: 26 Aug 1999

TI Hole trapping in mixed benzoxazole-benzimidazole carbocyanine spectrally
sensitized AgBrI (111) tabular microcrystals

AU De Keyzer, R.; Callant, P.

CS Agfa-Gevaert N. V., Mortsel, 2640, Belg.

SO IS&T's PICS Conference, Annual Conference [of the Society for Imaging
Science and Technology], 51st, Portland, Oreg., May 17-20, 1998 (1998),
311-313 Publisher: Society for Imaging Science and Technology,
Springfield, Va.
CODEN: 67ZGAU

DT Conference

LA English

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

AB The optical and photog. behavior was investigated of J-aggregated
benzoxazolecarbocyanine dyes (1 and 2) in the presence of low surface
concns. of benzimidazolecarbocyanine dyes (S1 and S2). Diffuse
reflectance spectra of the emulsions and the coatings (DRS) and photog.
sensitivity at ***405*** and 535 ***nm*** were examd. as a
function of concn. of the supersensitizing dye and the dye structure on
primitive AgBrI (111) tabular crystals. In the absence of the
supersensitizing dye a large degree of intrinsic as well as spectral
desensitization is detected for dye 1 and 2. The addn. of 1% of the
supersensitizing dye (relative to the spectral sensitizer) increases
sharply the intrinsic and spectral sensitivity without major changes in
the optical absorption spectra of the emulsion. The expts. confirm the
importance of supersensitization through energy transfer mechanism but
also that one has to take into account a decrease of recombination on
trapped holes on the supersensitizer after electron injection in the
conduction band.

ST spectral sensitizer supersensitizer cyanine dye photog emulsion hole
trapping; benzoxazole benzimidazole carbocyanine spectral sensitizer
supersensitizer photog

IT Reflection spectra
Reflection spectra
(UV-visible diffuse; hole trapping in photog. emulsions sensitized with
benzoxazole- and benzimidazolecarbocyanine dyes adsorbed on AgBrI(111)
tabular microcrystals)

IT UV and visible spectra
UV and visible spectra
(diffuse reflection; hole trapping in photog. emulsions sensitized with
benzoxazole- and benzimidazolecarbocyanine dyes adsorbed on AgBrI(111)
tabular microcrystals)

IT Hole traps
J-aggregates
Photographic sensitization
Photoinduced energy transfer
(hole trapping in photog. emulsions sensitized with benzoxazole- and
benzimidazolecarbocyanine dyes adsorbed on AgBrI(111) tabular
microcrystals)

IT Photographic sensitizers

(spectral; hole trapping in photog. emulsions sensitized with benzoxazole- and benzimidazolecarbocyanine dyes adsorbed on AgBrI(111) tabular microcrystals)

IT 155124-15-5, Silver bromide iodide
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(hole trapping in photog. emulsions sensitized with benzoxazole- and benzimidazolecarbocyanine dyes adsorbed on AgBrI(111) tabular microcrystals)

IT 28272-54-0 ***39201-42-8*** 63148-91-4 ***92771-38-5***
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(sensitizer; hole trapping in photog. emulsions sensitized with benzoxazole- and benzimidazolecarbocyanine dyes adsorbed on AgBrI(111) tabular microcrystals)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
(1) Berriman, R; Phot Sci Eng 1973, V17(2), P235 CAPLUS
(2) Muentner, A; IST 50 th Annual Congress Proceedings
(3) Siegel, J; IST 50 th Annual Congress Proceedings P117
(4) Simson; Phot Sci Eng 1975, V19, P339 CAPLUS
(5) Tani, T; J Phys Chem 1992, V96, P2778 CAPLUS

L11 ANSWER 15 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:449131 CAPLUS

DN 125:89249

ED Entered STN: 30 Jul 1996

TI Photocrosslinking initiators for improvement of photosensitivity and crosslinking speed

IN Sugita, Shuichi; Kamata, Hirotoshi; Myazaki, Satoru

PA Showa Denko Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08F002-50

ICS C08F004-52

CC 42-3 (Coatings, Inks, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08100011	A2	19960416	JP 1994-233651	19940928
PRAI	JP 1994-233651		19940928		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 08100011	ICM	C08F002-50
	ICS	C08F004-52

OS MARPAT 125:89249

GI

/ Structure 15 in file .gra /

AB Photocrosslinking initiators contain (1) pos. ion pigments of D+.A- (D+ = pos. ion which has absorption in the optional wavelength region from visible ray to near-IR ray; A- = neg. ion) and (2) B-based catalysts of Z+.R1R2B-R3R4 [Z+ = pos. ion chosen from pyridinium, quinolinium, diazonium, morpholinium, tetrazolium, acridinium, phosphonium, sulfonium, oxosulfonium, S, O, C, and halogenium, or pos. ion chosen from As, Co, Pd, Cr, Ti, Sn, Sb, and their compds.; R1-4 = alkyl, aryl, allyl, aralkyl, alkenyl, alkynyl, silyl (those groups may be substituted), heterocyclic group, halo; .gtoreq.1 R1-4 = (substituted) silyl]. Thus, a sample contg. pentaerythritol triacrylate-hexamethylene diisocyanate urethane prepolymer 70, nonaethylene glycol diacrylate 30, acetone 30, borate I (.lambda.max 822 nm) 0.1, and Bu4P+.Ph3B-SiPh3 0.3 g was coated on an Al substrate and irradiated with a halogen lamp (having wavelength ***400*** -1200 ***nm***) through a .ltoreq.800 nm wavelength-cut filter for 3 min to give a coating film, which showed double bond residue 33% and the photocrosslinking was almost completed.

ST photocrosslinking initiator pigment; HDI acrylic polyurethane coating

photocrosslinking; nonaethylene glycol diacrylate acrylic polyurethane coating; pentaerythritol triacrylate acrylic polyurethane coating photocrosslinking; boron catalyst photocrosslinking initiator; acrylic polyurethane coating photocrosslinking initiator

IT Coating materials
(photopolymn. initiators contg. pos. ion pigments and B-based catalysts for improvement of photosensitivity and polymn. speed)

IT Urethane polymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylic, coatings; photocrosslinking catalysts contg. pos. ion pigments and B-based compds. for improvement of photosensitivity and crosslinking speed)

IT Crosslinking catalysts
(photochem., photopolymn. initiators contg. pos. ion pigments and B-based catalysts for improvement of photosensitivity and polymn. speed)

IT Acrylic polymers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyurethane-, coatings; photocrosslinking catalysts contg. pos. ion pigments and B-based compds. for improvement of photosensitivity and crosslinking speed)

IT 125939-08-4 ***141563-94-2*** 141714-54-7 141714-60-5
178952-71-1, Tetrabutylphosphonium triphenylsilyltriphenylborate
178952-72-2, Tetramethylphosphonium triphenylsilyltriphenylborate
178952-73-3, Trimethylsulfonium triphenylsilyltriphenylborate
178952-75-5, Tetrabutylphosphonium (diphenylmethylsilyl)triphenylborate
RL: CAT (Catalyst use); USES (Uses)
(photocrosslinking catalysts contg. pos. ion pigments and B-based compds. for improvement of photosensitivity and crosslinking speed)

IT 176711-04-9P, Hexamethylene diisocyanate-nonaethylene glycol diacrylate-pentaerythritol triacrylate copolymer
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photocrosslinking catalysts contg. pos. ion pigments and B-based compds. for improvement of photosensitivity and crosslinking speed)

L11 ANSWER 16 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:68529 CAPLUS

DN 120:68529

ED Entered STN: 05 Feb 1994

TI Detection element for citral and .beta.-ionone.

IN Minami, Katsutoshi; Takazawa, Yosuke

PA Sekisui Chemical Co. Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G01N021-78

CC 80-2 (Organic Analytical Chemistry)

Section cross-reference(s): 27

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05196575	A2	19930806	JP 1992-9923	19920123
PRAI	JP 1992-9923		19920123		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 05196575	ICM	G01N021-78

GI

/ Structure 16 in file .gra /

AB The title element comprises a thin film of a mixt. of I and dioleoylphosphatidylcholine which adsorbs citral or .beta.-ionone on a substrate which does not emit fluorescence at ***400*** -650 ***nm*** wavelength. Optionally the substrate permeates rays of ***400*** -650 ***nm***. Citral and .beta.-ionone can be detd. easily optically.

ST detection element citral beta ionone
IT Spectrochemical analysis
(fluorometric, of citral and .beta.-ionone)
IT 79-77-6, .beta.-Ionone 5392-40-5, Citral
RL: ANT (Analyte); ANST (Analytical study)
(detection of, fluorometric, film of mixt. of
dioctadecyloxacarbocyanine and dioleoylphosphatidylcholine on substrate
for)
IT 68737-67-7, Dioleoylphosphatidylcholine
RL: ANST (Analytical study)
(mixt. of dioctadecyloxacarbocyanine and, on substrate, for detection
of citral and .beta.-ionone)
IT ***28462-56-8***
RL: ANST (Analytical study)
(mixt. of dioleoylphosphatidylcholine and, on substrate, for detection
of citral and .beta.-ionone)

L11 ANSWER 17 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:222743 CAPLUS
DN 118:222743
ED Entered STN: 29 May 1993
TI Color photographic photosensitive material with superior color
reproduction
IN Hioki, Katsuhiko; Yagi, Toshihiko; Ito, Yoshiro; Yamada, Yoshitaka;
Kagawa, Nobuaki
PA Konica Co., Japan
SO Jpn. Kokai Tokkyo Koho, 42 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03C007-26
ICS G03C007-20
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04204442	A2	19920724	JP 1990-337706	19901129
PRAI	JP 1990-337706		19901129		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 04204442	ICM	G03C007-26
	ICS	G03C007-20

AB The title photog. material having .gtoreq.1 blue-, green-, and
red-sensitive emulsion layers is characterized in that the highest
sensitivity wavelength of the spectral sensitivity distribution of the
green-sensitive emulsion layers is 527.ltoreq. .lambda.Gmax .ltoreq.590 nm
and the highest sensitivity wavelength of the spectral sensitivity
distribution of the red-sensitive emulsion layers is 595.ltoreq.
.lambda.Rmax .ltoreq.640 nm, the Ag halide grains contained in the
blue-sensitive emulsion layers have a AgCl content >80 mol %, the highest
sensitivity wavelength of the spectral sensitivity distribution of the
blue-sensitive emulsion layers is 406.ltoreq. .lambda.Bmax .ltoreq.480 nm,
and the blue sensitivity at ***410*** ***nm*** is >1/2 that of the
blue color highest sensitivity wavelength .lambda.Bmax. The color photog.
photosensitive material shows superior rapid processability and color
reproducibility.

ST color photog spectral sensitizer dye; silver chloride color photog
emulsion

IT Photographic emulsions
(color, silver chloride-based, for superior color reprodn.)

IT Photographic sensitizers
(spectral, cyanine dyes as, for superior color reprodn.)

IT 63148-97-0 92745-88-5
RL: USES (Uses)
(blue spectral photog. sensitizing dye)

IT ***41664-70-4*** ***92771-39-6*** ***139536-86-0***
146349-85-1 146895-59-2

RL: USES (Uses)
(green spectral photog. sensitizing dye)

IT 4622-66-6 85238-31-9 93290-07-4

RL: USES (Uses)
(red spectral photog. sensitizing dye)

L11 ANSWER 18 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:179888 CAPLUS
DN 118:179888
ED Entered STN: 01 May 1993
TI Manufacture of silver halide emulsion and color photographic material
using the emulsion
IN Asami, Masahiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 68 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03C001-035
ICS G03C001-12; G03C007-20; G03C007-26
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04230743	A2	19920819	JP 1991-122948	19910426
	US 5230995	A	19930727	US 1991-691277	19910425
PRAI	JP 1990-111180	A1	19900426		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 04230743	ICM	G03C001-035
	ICS	G03C001-12; G03C007-20; G03C007-26
US 5230995	NCL	430/567.000; 430/569.000; 430/572.000; 430/574.000; 430/613.000; 430/615.000

OS MARPAT 118:179888

AB A method for manufg. a Ag halide emulsion is described, which is virtually
free of AgI, comprises AgCl or AgBr contg. AgCl .gtoreq.90 mol%, and has
max. spectroscopic sensitivity distributions at 590-720 and ***390***
-590 ***nm***. The method involves adding, to a reactor, a
sensitizing compd. having the max. spectroscopic distribution at 590-720
nm prior to the addn. of a sensitizing compd. having the max.
spectroscopic distribution at ***390*** -590 ***nm*** between the
formation of Ag halide particles and the end of the chem. sensitization.
Addnl., the method may involve the addn. of a N-contg. heterocyclic compd.
A stable emulsion suitable for rapid processing is also described.

ST silver halide photog emulsion sensitizer

IT Photographic sensitizers

(prepn. of emulsions from)

IT Nucleic acids

RL: USES (Uses)

(silver halide photog. emulsions contg.)

IT Photographic emulsions

(color, manuf. of)

IT 73-24-5, 1H-Purin-6-amine, uses 2503-56-2 ***41665-49-0***
102731-88-4 117633-60-0

RL: USES (Uses)

(silver halide photog. emulsions contg.)

L11 ANSWER 19 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1993:164703 CAPLUS

DN 118:164703

ED Entered STN: 01 May 1993

TI Fluorescence-based sensor for bitter taste

IN Minami, Katsutoshi; Takazawa, Yosuke

PA Sekisui Chemical Co. Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G01N021-78

ICS G01N021-64

CC 9-1 (Biochemical Methods)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 04340444	A2	19921126	JP 1991-113375	19910517
PRAI	JP 1991-113375		19910517		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 04340444	ICM	G01N021-78
	ICS	G01N021-64

OS MARPAT 118:164703

GI

/ Structure 17 in file .gra /

AB A fluorescence-based sensor for the bitterness of a substance (such as quinine) is constructed consisting of a base plate (transparent quartz), a layer of the fluorescent substances I [X = O, S, CMe2; n = 0-3; such as 3,3'-dioctadecyl-2,2'-thiacyanine], and a lipid thin-layer. A test soln. is placed on the surface and measured at 495 ***nm*** with excitation at ***410*** ***nm***.

ST fluorescence sensor quinine bitterness

IT Bitterness

(detn. of, fluorescence sensor for)

IT Sensors

(fluorescence-based, construction of, for bitter substances detn.)

IT Membranes

(fluorescent and lipid, sensor contg., for bitter substances detn.)

IT Lipids, uses

RL: ANST (Analytical study)

(membrane, sensor contg., for bitter substances detn.)

IT Dyes

(fluorescent, membrane, sensor contg., for bitter substances detn.)

IT 130-95-0, Quinine

RL: PRP (Properties)

(bitterness of, detn. of, fluorescence sensor for)

IT ***34215-57-1*** 53533-50-9 106853-81-0 142714-31-6

RL: ANST (Analytical study)

(membrane, sensor contg., for bitter substances detn.)

L11 ANSWER 20 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1993:29845 CAPLUS

DN 118:29845

ED Entered STN: 24 Jan 1993

TI Light-sensitive silver halide color photographic material

IN Shimazaki, Hiroshi; Irie, Yasushi; Yabuuchi, Katuya

PA Konica Co., Japan

SO Eur. Pat. Appl., 37 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM G03C007-30

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 499209	A1	19920819	EP 1992-102269	19920211
R: DE, FR, GB, NL				
JP 05040330	A2	19930219	JP 1991-42530	19910214
JP 2926662	B2	19990728		
US 5206124	A	19930427	US 1992-832934	19920211
PRAI JP 1991-42530	A	19910214		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 499209	ICM	G03C007-30
US 5206124	NCL	430/505.000; 430/502.000; 430/503.000; 430/508.000; 430/957.000

AB A Ag halide color photog. material is described comprising blue-, green-, and red-sensitive layers where the blue-sensitive layer has the max. spectral sensitivity at a wavelength within the range of ***415*** -470

nm and the spectral sensitivity at 480 nm of the blue-sensitive layer is .ltoreq.35% of the max. sensitivity. The green-sensitive layer has the max. spectral sensitivity at a wavelength within the range of 530-560 nm and the spectral sensitivity at 500 nm of the green-sensitive layer is .gtoreq.25% of the max. sensitivity. The material is excellent in reproducibility of the green or blue subjects.

ST blue sensitivity photog film; green sensitivity photog film
IT Photographic films
(color, with improved sensitivity for blue and green)
IT Photographic sensitizers
(spectral, blue and green)
IT ***33628-03-4*** 34141-97-4 90901-34-1 ***114561-83-0***
RL: TEM (Technical or engineered material use); USES (Uses)
(photog. spectral sensitizer)

L11 ANSWER 21 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:18692 CAPLUS
DN 118:18692
ED Entered STN: 24 Jan 1993
TI Flow cytometric measurement of lipid peroxidation in vital cells using parinaric acid
AU Hedley, David; Chow, Sue
CS Dep. Pathol., Ontario Cancer Inst., Toronto, ON, M5X 1K9, Can.
SO Cytometry (1992), 13(7), 686-92
CODEN: CYTODQ; ISSN: 0196-4763
DT Journal
LA English
CC 9-5 (Biochemical Methods)
Section cross-reference(s): 13
AB A method for measuring lipid peroxidn. using time resolved flow cytometry is described. Because of its chem. nature, the naturally fluorescent fatty acid cis-parinaric acid is readily consumed in lipid peroxidn. reactions. It could be loaded into Chinese hamster ovary cells in a time and concn. dependent manner at 37.degree., with 5 .mu.M for 60' giving consistent, bright fluorescence without evidence of cytotoxicity. Examn. of cells by fluorescence microscopy showed diffuse staining of surface and internal membranes. Cells were maintained at 37.degree. while being examd. in an Epics Elite flow cytometer equipped with a 325-nm HeCd laser, and parinaric acid fluorescence at ***405*** ***nm*** was measured over time. Addn. of the oxidant tert-Bu hydroperoxide resulted in a burst of intracellular oxidn., shown by simultaneously loading the cells with dichlorofluorescein, and loss of parinaric fluorescence over time. This was followed by cell death, indicated by loss of forward light scatter and uptake of propidium iodide. Pretreatment of the cells with the antioxidant .alpha.-tocopherol, 200 .mu.M, reduced the rate of loss of parinaric acid fluorescence and delayed the onset of cell death. Simultaneous biochem. detn. of the lipid peroxidn. breakdown product malondialdehyde confirmed a close temporal relationship with loss of parinaric acid fluorescence, both with and without .alpha.-tocopherol pretreatment and suggested that the flow cytometric assay for lipid peroxidn. is of comparable sensitivity. The mitochondrial stain dodecyl acridine orange and the cyanine dye DiOC(6)3 were combined with cis-parinaric acid staining and could be excited by the latter using resonance energy transfer. Because these two probes show a degree of organelle specificity, they can be used to measure the loss of parinaric acid due to lipid peroxidn. at defined subcellular sites. Although the authors' own interest in the method is to examine the actions of redox cycling anticancer drugs and the integrity of host antioxidant defenses as a possible mechanism of drug resistance, it appears to be a versatile technique for investigating an important process of cell injury that is difficult to study using std. biochem. assays.

ST flow cytometry lipid peroxidn analysis parinarate; fluorometry flow cytometry lipid peroxidn
IT Staining, biological
(of cells, with parinaric acid, for lipid peroxidn. anal. by flow cytometry)
IT Peroxidation
(of lipids, in cells, flow cytometry and parinaric acid for anal. of)
IT Lipids, biological studies
RL: BIOL (Biological study)
(peroxidn. of, in cells, flow cytometry for anal. of, parinaric acid in)

IT Toxicity
(cytotoxicity, lipid peroxidn. in, flow cytometry and parinaric acid
for-anal. of)

IT Cytometry
(flow, time-resolved fluorometric, for lipid peroxidn. anal. in live
cells with parinaric acid)

IT 593-38-4, cis-Parinaric acid
RL: ANST (Analytical study)
(for lipid peroxidn. anal. in live cells using flow cytometry)

IT 41387-42-2 ***53213-82-4***
RL: ANST (Analytical study)
(staining by parinaric acid and, for lipid peroxidn. measurements in
live cells by flow cytometry)

L11 ANSWER 22 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:224544 CAPLUS

DN 116:224544

ED Entered STN: 31 May 1992

TI Color photographic light-sensitive material offering excellent hue
reproduction

IN Fukazawa, Fumie; Irie, Yasushi; Shimazaki, Hiroshi; Yabuuchi, Katuya;
Shimba, Satoru

PA Konica Co., Japan

SO Eur. Pat. Appl., 135 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM G03C007-30

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 434043	A1	19910626	EP 1990-124806	19901219
	R: DE, GB, IT, NL				
	JP 03194546	A2	19910826	JP 1989-334481	19891222
	JP 3020105	B2	20000315		
	JP 03264954	A2	19911126	JP 1990-63871	19900314
	JP 03290658	A2	19911220	JP 1990-92721	19900407
	US 5180657	A	19930119	US 1990-629598	19901218
PRAI	JP 1989-334481	A	19891222		
	JP 1990-63871	A	19900314		
	JP 1990-92721	A	19900407		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 434043	ICM	G03C007-30
US 5180657	NCL	430/503.000; 430/504.000; 430/505.000; 430/574.000; 430/583.000; 430/588.000

OS MARPAT 116:224544

AB A Ag halide color photog. material is described having max. spectral
sensitivity (.lambda.B) of the blue-sensitive emulsion layer at
410 -470 ***nm*** and sensitivity at 480 nm .ltoreq.1/2 that at
.lambda.B. Preferably, the max. sensitivity wavelength (.lambda.G) of the
green-sensitive layer is at 530-560 nm and its sensitivity at 500 nm is
.gtoreq.1/4 that at .lambda.G. The max. sensitivity wavelength of the
red-sensitive layer is at 595-625 nm and its max. sensitivity at
400 -480 ***nm*** is .gtoreq.1.5% of the sensitivity of the
blue-sensitive layer at .lambda.B. The material provides high chroma and
excellent hue reprodn.

ST emulsion photog sensitivity

IT Photographic couplers

Photographic sensitizers

(for excellent hue and color reprodn.)

IT Photographic emulsions

(color, for excellent hue and reprodn.)

IT 80567-35-7 85212-79-9 103576-30-3 107703-70-8 119142-30-2

RL: TEM (Technical or engineered material use); USES (Uses)

(photog. coupler)

IT 4622-66-6 23568-98-1 ***33628-03-4*** 33628-08-9 34141-97-4

63148-96-9 68392-94-9 85238-31-9 ***114561-83-0*** 139453-99-9

141231-81-4 141231-82-5

RL: TEM (Technical or engineered material use); USES (Uses)
(photog. sensitizer)

L11 ANSWER' 23 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1991:691007 CAPLUS
DN 115:291007
ED Entered STN: 27 Dec 1991
TI Photographic silver halide materials
IN Takahashi, Toshiro; Okamura, Hisashi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 34 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03C001-06
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
Section cross-reference(s): 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02308239	A2	19901221	JP 1989-130981	19890524
PRAI	JP 1989-130981		19890524		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 02308239	ICM	G03C001-06

GI

/ Structure 18 in file .gra /

AB The title materials comprise .gtoreq.1 photosensitive silver halide emulsion layers which are spectrally sensitized by a sensitizing dye having max. absorption at 450-580 nm. The said emulsion layers or other hydrophilic colloid layers contain tetrazole deriv. I (R1-R3 = alkyl, amino, acylamino, OH, etc.; x- = anion). The title materials also contain dyes having max. absorption at 300 ***nm*** to ***420***
nm and .gtoreq.1 redox compds. which release development inhibitors upon oxidn. The use of the title materials gives excellent image reprodn.

ST silver halide photog material; tetrazole deriv photog material; dye photog

IT Photographic emulsions
(tetrazole derivs. for)

IT 1519-55-7 14542-06-4 132952-67-1 136647-76-2
RL: USES (Uses)
(photog. dye)

IT 104497-77-0 104497-80-5
RL: USES (Uses)
(photog. emulsions contg.)

IT 133682-17-4 134282-47-6 136647-77-3 137692-94-5
RL: USES (Uses)
(redox compd., in photog. materials)

IT ***18360-25-3***
RL: USES (Uses)
(sensitizing dye)

L11 ANSWER 24 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1989:182876 CAPLUS
DN 110:182876
ED Entered STN: 12 May 1989
TI Process for the formation of color image and band stop filter used therefor
IN Takahashi, Koji; Shiba, Keisuke; Muramatsu, Yukio; Taguchi, Seiichi
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 157 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM G03C007-26
ICS G03C001-84

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 295716	A2	19881221	EP 1988-109778	19880620
	EP 295716	A3	19891123		
	EP 295716	B1	19941207		
	R: DE, FR, GB, NL				
	JP 01126648	A2	19890518	JP 1987-285998	19871112
	JP 2612176	B2	19970521		
	JP 02050154	A2	19900220	JP 1988-148380	19880617
	JP 02050155	A2	19900220	JP 1988-148381	19880617
	CA 1339192	A1	19970805	CA 1988-569832	19880617
	US 4880726	A	19891114	US 1988-270712	19881114
PRAI	JP 1988-112608	A	19870511		
	JP 1987-150320	A	19870618		
	JP 1987-195222	A	19870806		
	JP 1987-206589	A	19870821		
	JP 1987-285998	A	19871112		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 295716	ICM	G03C007-26
	ICS	G03C001-84
JP 02050155	ECLA	G03C001/825; G03C007/30S
US 4880726	NCL	430/376.000; 430/357.000; 430/372.000; 430/383.000; 430/551.000

AB A process for the formation of color images comprising printing on a light-sensitive material having a blue-sensitive layer, a green-sensitive layer and a red-sensitive layer on a support from a color print original in a subtractive exposure process, and then substantially subsequently color development, the effective spectral sensitivity distribution of .gtoreq.2 light-sensitive layers in the light-sensitive material are substantially independent from each other in a wavelength band of ***400*** -750 ***nm*** and thereby the av. color mixing degree in each light-sensitive layer is .ltoreq.0.13. The material contains cyanine dyes as spectral sensitizers and is developed in the presence of an ethylene compd. The material has improved fidelity of color reprodn. and high sensitivity.

ST color fidelity photog sensitivity distribution; filter band stop photog material

IT Photographic films

Photographic paper

(color, sensitivity distribution in, for high color fidelity)

IT 23730-61-2 86271-35-4 120152-80-9 120152-81-0 120152-82-1

RL: USES (Uses)

(photog. color developer contg., for high color fidelity)

IT 4751-25-1 16470-45-4 20517-94-6 60760-51-2 65860-85-7 92991-03-2

98835-00-8 ***99501-48-1*** 108457-44-9 116826-66-5

117541-43-2 119712-73-1 120152-76-3 120152-77-4

120152-78-5 ***120152-79-6*** ***120180-37-2***

RL: TEM (Technical or engineered material use); USES (Uses)

(photog. material contg., with high color fidelity)

L11 ANSWER 25 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1987:25775 CAPLUS

DN 106:25775

ED Entered STN: 24 Jan 1987

TI Dye-sensitized electrophotographic recording material

IN Franke, Werner; Brahm, Richard

PA Hoechst A.-G. , Fed. Rep. Ger.

SO Ger. Offen., 20 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM G03G005-09

ICS G03G005-06

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 3509147	A1	19860918	DE 1985-3509147	19850314
	US 4657836	A	19870414	US 1986-836419	19860305
	EP 194624	A2	19860917	EP 1986-103130	19860308
	EP 194624	A3	19880803		
	EP 194624	B1	19930609		
	R: DE, FR, GB, NL				
	JP 61217051	A2	19860926	JP 1986-55180	19860314
PRAI	DE 1985-3509147	A	19850314		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 3509147	ICM	G03G005-09
	ICS	G03G005-06
US 4657836	NCL	430/083.000; 430/093.000; 430/095.000
GI		

/ Structure 19 in file .gra /

AB Inorg. and org. electrophotog. photoreceptors, which are sensitive in the ***400*** -700- ***nm*** region, are described. An electrochem. roughened and anodized Al foil was pretreated with poly(vinylphosphonic acid) and then coated with a soln. contg. the pentamethine cyanine dye (I), the trimethinecyanine dye (II), Astrazon Orange R, 2-vinyl-4-(2'-chlorophenyl-5-(4'-diethylaminophenyl)oxazole, maleic anhydride-styrene copolymer, Me glycol, THF, and BuOAc and dried to give a photoreceptor sensitive in the ***420*** -730- ***nm*** region. The photoreceptor was then used to prep. an offset printing plate capable of a high print run.

ST cyanine dye sensitizer electrophotog photoreceptor; inorg photoconductor electrophotog dye sensitizer; org photoconductor electrophotog dye sensitizer; zinc oxide photoconductor electrophotog sensitizer; oxazole photoconductor electrophotog dye sensitizer; oxadiazole photoconductor electrophotog dye sensitizer

IT Electrophotographic sensutizers
(cyanine dyes as, for inorg. and org. photoconductors)

IT Phenolic resins, uses and miscellaneous
RL: USES (Uses)
(electrophotog. photoreceptor with photoconductor layer contg. binder of, spectral sensitization of, dye sensitizer compns. for)

IT Electrophotographic plates
(with sensitivity in visible region)

IT Lithographic plates
(offset, cyanine dye-sensitized laser-sensitive materials for fabrication of)

IT Electric circuits
(printed, cyanine dye-sensitized laser-sensitive materials for fabrication of)

IT 1314-13-2, Zinc oxide, uses and miscellaneous 1679-98-7 22159-33-7
55766-52-4
RL: USES (Uses)
(electrophotog. photoreceptor with photoconductive layer contg., spectral sensitization of, dye sensitizer compns. for)

IT 9011-13-6, Maleic anhydride-styrene copolymer
RL: USES (Uses)
(electrophotog. photoreceptor with photoconductor layer contg. binder of, spectral sensitization of, dye sensitizer compns. for)

IT 3056-93-7, Astrazon Orange G 4208-80-4, Astrazon Yellow 3G 4208-81-5, Astrazon Yellow 5G 4657-00-5, Astrazon Orange R 6359-50-8 25470-94-4 36536-22-8 ***105937-85-7***
RL: USES (Uses)
(spectral sensitizer compn. contg., for electrophotog. photoconductors)

L11 ANSWER 26 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1986:43214 CAPLUS

DN 104:43214

ED Entered STN: 08 Feb 1986

TI Sensitized silver halide photothermographic photosensitive units

IN Shiba, Keisuke; Mihara, Yuji; Okubo, Kinji; Masuda, Takao; Tsuji, Koji

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM G03C001-28
CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60133442	A2	19850716	JP 1984-216920	19841016
PRAI	JP 1984-216920		19841016		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 60133442	ICM	G03C001-28

GI For diagram(s), see printed CA Issue.

AB Ag halide photothermog. photosensitive units contain an org. Ag salt and wurtzite- or zinc blende-structured Ag halide particles (.gtoreq.30 mol% AgI) on which a sensitizer dye selected from I [n = 0, 1; A, B = substituted oxazole, indolenine, thiazole, selenazole or pyridine ring; A, B may be substituted imidazole when n = 0; R, R1 = alkyl, aryl, allyl; Z, Z1, Z2 = (un)substituted methyne; .gtoreq.1 of Z, Z1, Z2 is substituted methyne when n = 1; X- = anion; m = 0, 1], II (p = 0, 1; C = thiazole, thiazoline, oxazole, oxazoline, pyrrolidine, piperidine, imidazole or tetrazole ring; D = thiohydantoin or rhodanine ring; R2 = alkyl, aryl, allyl; Z3, Z4 = methyne), and III [q = 0, 1; E = benzene or naphthalene ring; R3, R4 = alkyl, aryl, allyl; Z5 = NR5 (R5 = aryl), CR6R7 (R6, R7 = CN, alkylcarbonyl, alkoxy carbonyl), imidazole ring, thiazole ring]. The sensitizer dye selected from I, II, and III should have an oxidn. potential of <1 V and an oxidn.-redn. voltage difference of >2 V. Thus, ascorbic acid monopalmitate, methyl Cellosolve, a 8.5% NH4I soln., a 0.2% soln. of dye IV, and a 2% 2-mercapto-3,4-methylthiazole soln. were added to a dispersion contg. poly(vinyl butyral) and benzotriazole Ag salt, the mixt. coated on a polyester film support, and overcoated with a vinyl acetate-vinyl chloride copolymer soln. to give a photothermog. film, which showed spectral sensitivity peaks at ***425*** and 520 ***nm***.

ST photothermog silver halide sensitizer; dye sensitizer photothermog

IT Photothermography

(photosensitive compns. contg. org. silver salt and dye-sensitized silver halide for)

IT 92-69-3 119-39-1 1330-84-3 5351-51-9 7292-14-0

RL: USES (Uses)

(photothermog. photosensitive compns. contg.)

IT 7783-96-2

RL: USES (Uses)

(photothermog. photosensitive compns. contg. dye-sensitized)

IT 2489-05-6 18268-45-6 27527-80-6

RL: USES (Uses)

(photothermog. photosensitive compns. contg. dye-sensitized silver halide and)

IT 28279-05-2

RL: USES (Uses)

(photothermog. photosensitive compns. contg. org. silver salt, silver halide and)

IT 3568-36-3 ***99163-14-1***

RL: USES (Uses)

(sensitizer, for photothermog. photosensitive compns. contg. org. silver salt and silver halide)

L11 ANSWER 27 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1983:225255 CAPLUS

DN 98:225255

ED Entered STN: 12 May 1984

TI Photographic compositions and elements spectrally sensitized with new methine dyes

IN Yamamoto, Yasushi S.

PA Eastman Kodak Co., USA

SO U.S., 8 pp.

CODEN: USXXAM

DT Patent

LA English

IC G03C001-18
INCL 430588000
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
Section cross-reference(s): 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4375508	A	19830301	US 1981-311586	19811015
PRAI	US 1981-311586		19811015		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 4375508	IC	G03C001-18
	INCL	430588000
US 4375508	NCL	430/588.000; 430/570.000; 430/580.000; 430/581.000; 430/582.000; 430/585.000; 430/586.000; 430/587.000; 430/592.000

GI

/ Structure 20 in file .gra /

AB Methine dyes for use as photog. spectral sensitizers are described. These dyes prepd. from an intermediate having an acetylenically unsatd. hydrocarbon chain terminated with a nucleophilic group. The acetylenically unsatd. hydrocarbon chain is bonded to a N atom in a heterocyclic ring system of the type used in cyanine dyes. Thus, a photog. support was coated with S-Au sensitized monodispersed gelatin-Ag(Br,I) emulsion (2.5 mol% I) contg. I 8 .times. 10-4 mol/mol Ag, imagewise exposed, developed in an N-methyl-p-aminophenol/hydroquinone developer, fixed, washed, and dried. The sensitizing max. of the dye I was 600 nm and the sensitizing range 500-630 nm. The speed of the element at ***400*** ***nm*** was 339.

ST methine dye spectral sensitizer photog

IT Photographic sensitizers

(spectral, methine dyes as)

IT 85746-04-9 85746-05-0 ***85746-06-1***

RL: TEM (Technical or engineered material use); USES (Uses)
(photog. spectral sensitizer)

IT 32634-37-0P 85746-00-5P 85746-01-6P 85746-02-7P 85746-03-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and reaction of)

IT 1006-99-1 3237-62-5

RL: RCT (Reactant); RACT (Reactant or reagent).
(reaction of, with dibromobutene)

IT 2219-66-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with methylbenzimidazole derivs.)

IT 6992-73-0 35080-47-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(reactions of)

L11 ANSWER 28 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1980:165192 CAPLUS

DN 92:165192

ED Entered STN: 12 May 1984

TI Study of photodegradation of some polymethine compounds

AU Vranchev, D.

CS Plovdiv. Univ., Plovdiv, Bulg.

SO Bulgarian Journal of Physics (1979), 6(5), 561-7

CODEN: BJPHD5; ISSN: 0323-9217

DT Journal

LA Russian

CC 40-7 (Dyes, Fluorescent Whitening Agents, and Photosensitizers)

Section cross-reference(s): 73

AB In terms of their photodegrdn., related to their durability in lasers, the 9 sym. cyanines studied could be divided into 2 groups: those without meso substituents, photochem. reactions of which occurred in the first excited singlet state, and those with meso substituents, photochem. reactions of

which occurred in the triplet state. Factors affecting the photochem. stability of cyanine solns. included the nature of the heterocyclic nucleus, the length of the polymethine chain, and the nature of the solvent. Upon irradiation of, e.g., 3,3'-diethylthiatricarbocyanine iodide [3071-70-3] in EtOH soln., the principal absorption at 780 nm decreased sharply, absorption at 216 ***nm*** and ***400*** -500 ***nm*** increased, and isobestic points appeared at 300, 350, 375, and 525 nm.

ST solvent effect cyanine photodegradation; thiacyanine photodegradation; selenacyanine photodegradation; laser dye photolytic stability

IT Solvation
(of cyanine dyes, photochem. stability in relation to)

IT Solvent effect
(on photochem. degradation of cyanine dyes)

IT Dyes, cyanine
(photochem. degradation of, effect of mol. structure and solvent on)

IT Degradation
(photochem., of cyanine dyes, effect of mol. structure and solvent on)

IT ***905-96-4*** 1049-38-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(photochem. degradation of)

IT 514-73-8 905-97-5 909-63-7 3065-79-0 3071-70-3 61878-83-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(photochem. degradation of, solvent effect on)

L11 ANSWER 29 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1980:85938 CAPLUS

DN 92:85938

ED Entered STN: 12 May 1984

TI Radiographic silver halide sensitive materials

IN Hinata, Masanao; Takei, Haruo; Miyasaka, Nobuaki; Takahashi, Kenji

PA Fuji Photo Film Co., Ltd., Japan

SO U.S., 9 pp.
CODEN: USXXAM

DT Patent

LA English

IC G03C001-92

INCL 096082000

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4172730	A	19791030	US 1977-787725	19770415
	JP 59009891	B4	19840306	JP 1975-32789	19750318
PRAI	JP 1975-32789	A	19750318		
	US 1976-668003	A2	19760318		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 4172730	IC	G03C001-92
	INCL	096082000
US 4172730	NCL	430/139.000; 430/588.000; 430/966.000

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Ag halide radiog. materials for use with fluorescent intensifying screens having a max. emission in the green spectral region wherein .gtoreq.1/2 of the emission energy is in the wavelength range of .gtorsim. ***400*** ***nm*** contain .ltoreq.8.6 Ag/m2 and .gtoreq.1 of the emulsion layers therein contain .gtoreq.1 benzoimidazoloxacarbocyanine dye with the formula I (R, R1 = H or halogen; R2, R3 = H, halogen, alkoxy, or Ph; R4, R5, R6 = alkyl and .gtoreq.1 of R5 and R6 = sulfoalkyl or carboxylalkyl; X- = anion; n = 1,2) and .gtoreq.1 oxacarbocyanine dye with the formula II (R-R3 = H, halogen, or alkoxy; R4 = H or lower alkyl; R5, R6 = alkyl and .gtoreq.1 of R5 and R6 = sulfoalkyl or carboxylalkyl; X- = anion; m = 1,2). Thus, a blue-tinted poly(ethylene terephthalate) support was coated on both sides with a gelatin-Ag(Br,I) emulsion contg. III 1 .times. 10-5 mol/kg emulsion and IV 30 .times. 10-5 mol/kg emulsion at 3.5 g Ag/m2. Both emulsions were given a gelatin protective layer and the resultant

finished film was then exposed and developed to show a relative sensitivity of 120 and a modulation transfer function of 0.63 vs. 100 and 0.50, resp., for a control contg. III alone and 93 and 0.55, resp., for a control contg. IV alone.

ST benzoimidazolooxacarbocyanine dye photog sensitizer; oxacarbocyanine dye photog sensitizer; carbocyanine dye photog sensitizer; radiog film carbocyanine dye sensitizer

IT Photographic sensitizers
(benzoimidazolooxacarbocyanine dye-oxacarbocyanine dye mixts. as, for radiog. materials)

IT Radiography
(photog. materials for, sensitized with benzoimidazolooxacarbocyanine dye-oxacarbocyanine dye mixts.)

IT ***48236-39-1*** ***50802-31-8*** ***72741-75-4***

RL: USES (Uses)
(photog. sensitizer combinations contg. oxacarbocyanine dyes and, for radiog. material)

IT ***6099-46-3*** ***6099-52-1*** ***6200-35-7***

RL: USES (Uses)
(photog. sensitizer dye combinations contg. benzoimidazolooxacarbocyanine dyes and, for radiog. material)

L11 ANSWER 30 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1980:50056 CAPLUS

DN 92:50056

ED Entered STN: 12 May 1984

TI Multilayer color photographic paper

IN Taguchi, Masahiko; Mogaki, Katsuo; Nakamura, Shinichi

PA Konishiroku Photo Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

IC G03C007-20; G03C001-86

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 54099434	A2	19790806	JP 1978-5667	19780120
PRAI JP 1978-5667	A	19780120		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 54099434	IC	G03C007-20IC G03C001-86

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Multilayer color photog. papers possess reflectivity (of the unexposed area after photog. processing) at 570-660 nm, 480-570 ***nm***, and ***420*** -480 ***nm*** wavelength ranges of .gtoreq.70%, within .+-.5% of the reflectivity in the 570-660 nm range, and within +10% of the reflectivity in the 570-660 nm range, resp. The color photog. papers exhibit excellent image clearness. The above requirements can be achieved easily by selecting proper support and photog. coating compns. esp. by properly selecting blue-sensitizing dye and magenta coupler. Thus, a paper support was coated with (1) a polyethylene compn. contg. a white pigment (anatase and rutile type TiO2 mixt. coated with Al2O3) and a bluing agent; (2) a blue-sensitive emulsion contg. .alpha.-(1-benzyl-2-phenyl-3,5-dioxo-1,2,4-triazolidinyl-4)-.alpha.-pivalyl-2-chloro-5-[.gamma.-(2,4-di-tert-amylphenoxy)butyramido]acetanilide (a yellow coupler) and the sensitizing dye I; (3) an intermediate layer; (4) a green-sensitive emulsion layer contg. the magenta coupler II and the sensitizing dye III; (5) a UV-absorber contg. intermediate layer; (6) a red-sensitive layer contg. 2,4-dichloro-3-methyl-6-[.alpha.-(2,4-di-tert-amylphenoxy)butyramido]phenol (a cyan coupler), the sensitizer dye IV, and a fluorescent brightener; and (7) a gelatin protective layer. The photog. paper was developed without exposure to give av. reflectivities of 83, 77, and 76% for 420-480, 480-570, and 570-660 nm wavelength regions, resp.

The photog. paper was then sensitometrically exposed and developed to give relative sensitivity, gamma.-value, and yellow stain of 260, 3.00, and 0.05, resp.

ST multilayer color photog paper

IT Photographic paper

(color, magenta coupler-blue sensitizer combinations for improved background whiteness for)

IT 31037-84-0

RL: TEM (Technical or engineered material use); USES (Uses)
(photog. cyan coupler)

IT 52026-88-7 54189-02-5 55036-42-5 61853-53-0 61853-56-3
61853-60-9 65756-73-2 69084-83-9 69645-30-3 69645-31-4
69645-32-5

RL: TEM (Technical or engineered material use); USES (Uses)
(photog. magenta coupler)

IT 27930-83-2 28022-99-3 ***29133-39-9*** 51588-85-3 51588-94-4
51588-96-6 55425-27-9 70679-43-5 72395-54-1 72395-55-2
72395-56-3 72395-58-5 72395-59-6

RL: TEM (Technical or engineered material use); USES (Uses)
(photog. sensitizer)

IT 61119-59-3

RL: TEM (Technical or engineered material use); USES (Uses)
(photog. yellow coupler)

L11 ANSWER 31 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1979:178202 CAPLUS

DN 90:178202

ED Entered STN: 12 May 1984

TI Combination of photosensitive elements suited for use in radiography

IN Van Doorselaer, Marcel K.

PA Agfa-Gevaert N. V., Belg.

SO U.S., 14 pp.

CODEN: USXXAM

DT Patent

LA English

IC G03C001-92

INCL 096082000

CC 74-8 (Radiation Chemistry, Photochemistry, and Photographic Processes)

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4130429	A	19781219	US 1975-624258	19751020
	FR 2205683	A1	19740531	FR 1973-37511	19731017
	FR 2205683	B1	19851227		
	BE 806384	A2	19740423	BE 1973-1005447	19731023
	GB 1459789	A	19761231	GB 1973-50829	19731101
PRAI	US 1972-303386	A2	19721103		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 4130429	IC	G03C001-92
	INCL	096082000
US 4130429	NCL	430/139.000; 430/966.000; 976/DIG.439

AB A combination suitable for radiog. consists of an x-ray fluorescent screen and a photosensitive Ag halide recording material. The x-ray screen has .gtoreq.50% of its spectral emission > ***410*** ***nm***, with its emission max. at 480-600 nm. The light absorption spectrum of the Ag halide material corresponds with the light emission spectrum of the x-ray screen. The screen contains Y oxysulfide activated with 0.1 to 10% by wt. of Tb or Tb and Dy and Gd or La or Lu oxysulfide activated with Tb or Dy. The Ag halide recording material uses a blue colored and a naphthol- or phenol-contg. emulsion layer.

ST radiog film intensifying screen combination

IT Radiography

(photosensitive elements for, contg. photog. film and phosphor-contg. intensifying screen)

IT Photographic films

(radiog., x-ray image intensifying screen combinations with)

IT 12237-27-3

RL: USES (Uses)

(antihalation layers contg., for radiog. films)

IT 7440-27-9, uses and miscellaneous

RL: USES (Uses)
 (lanthanum oxysulfide doped with, x-ray image intensifying screens
 contg., for combination with radiog. films)
 IT 53014-12-3 53014-13-4
 RL: USES (Uses)
 (photog. filter dye, for radiog. film)
 IT ***53014-11-2***
 RL: TEM (Technical or engineered material use); USES (Uses)
 (photog. sensitizer, for radiog. films)
 IT 12339-07-0 12340-04-4
 RL: USES (Uses)
 (terbium-activated, x-ray image intensifying screen contg., for
 combination with radiog. film)

L11 ANSWER 32 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1978:107833 CAPLUS
 DN 88:107833
 ED Entered STN: 12 May 1984
 TI Photochemical hydrogen formation by the use of titanium dioxide thin-film
 electrodes with visible-light excitation
 AU Fleischauer, Paul D.; Allen, John K.
 CS Ivan A. Getting Lab., Aerosp. Corp., El Segundo, CA, USA
 SO Journal of Physical Chemistry (1978), 82(4), 432-8
 CODEN: JPCHAX; ISSN: 0022-3654
 DT Journal
 LA English
 CC 52-1 (Electrochemical, Radiational, and Thermal Energy Technology)
 Section cross-reference(s): 74, 49
 AB TiO2 thin-film electrodes were sensitized to visible light
 (.lambda.ltoreq.630nm) with concomitant formation of H at a Pt counter
 electrode. A divided cell was used with the sensitizer at ambient pH
 (.apprx.4) in the anode chamber and N H2SO4 in the cathode side.
 Transparent TiO2 electrodes were made for this process by the
 radio-frequency sputtering of .apprx.250-nm thick films on conductive
 substrates, i.e., Sn-doped In2O3 on glass. Two types of sensitization
 process were demonstrated: nonabsorbing supersensitizers were found that
 sufficiently amplify photocurrents in reduced TiO2 films to obtain H with
 excitation in the ***400*** -500- ***nm*** region, and true dye
 sensitization of the H formation reaction was obtained with a combination
 of the supersensitizers and the dye rhodamine B [81-88-9] (.lambda.
 500-630 nm). An applied bias voltage (.gtoreq.0.2 V) was necessary for
 visual observation of sensitized H formation on the cathode. A
 5-film-stacked electrode configuration was designed and used to produce H
 at rates of .apprx.0.1 mL/h for .lambda.ex .gtoreq.500 nm and 0.2 mL/h for
 .lambda.ex .gtoreq. ***400*** ***nm*** with a 200-W Hg arc lamp.
 ST hydrogen manuf photoelectrochem cell; titanium dioxide excitation hydrogen
 manuf; oxide titanium excitation hydrogen manuf
 IT Electrodes
 (photoelectrochem.-cell, titanium dioxide, visible-light excitation of
 thin-film, for hydrogen manuf. from water)
 IT 13463-67-7P, uses and miscellaneous
 RL: PREP (Preparation); USES (Uses)
 (electrodes, photoelectrochem.-cell, visible-light excitation of, for
 hydrogen manuf. from water)
 IT 1333-74-0P, preparation
 RL: PREP (Preparation)
 (manuf. of, photochem. from water, with visible-light excitation of
 thin-film titanium dioxide electrodes)
 IT 81-88-9 574-93-6 2321-07-5 3564-18-9 7187-55-5 18403-49-1
 20766-55-6 37069-74-2 ***37069-75-3*** 37069-76-4 65147-28-6
 RL: USES (Uses)
 (titanium dioxide thin-film electrode sensitized with, for hydrogen
 manuf. from water)

L11 ANSWER 33 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1977:446551 CAPLUS
 DN 87:46551
 ED Entered STN: 12 May 1984
 TI Radiographic method and sensitive material therefor
 IN Hinata, Masanao; Takei, Haruo; Miyasaka, Nobuaki; Takahashi, Kenji
 PA Fuji Photo Film Co., Ltd., Japan
 SO Ger. Offen., 43 pp.

CODEN: GWXXBX
DT Patent
LA Germany
IC G03C001-19
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2614352	A1	19761014	DE 1976-2614352	19760402
	JP 51115820	A2	19761012	JP 1975-40577	19750403
	JP 59009892	B4	19840306		
	BE 840345	A1	19760802	BE 1976-165815	19760402
	US 4040833	A	19770809	US 1976-672947	19760402
PRAI	JP 1975-40577	A	19750403		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 2614352	IC	G03C001-19
US 4040833	NCL	430/139.000; 430/574.000; 430/577.000; 430/966.000; 976/DIG.439

GI

/ Structure 21 in file .gra /

AB Radiog. materials for use with intensifying screens having a max. emission at 500 to .apprx.700 nm with at .gtoreq.1/2 of the emission energy at .apprx. ***400*** ***nm*** contain the cyanine dyes I (R = Et, (CH₂)₃SO₃H.NET₃, (CH₂)₄SO₃Na; R₁ = Me, Et; R₂ = (CH₂)₂CHMeSO₃-, (CH₂)₃SO₃-, (CH₂)₄SO₃-, (CH₂)₃O₂CMe; X- = anion; m = 1,2) at 1.0 .times. 10-5-1.0 .times. 10-3 mol and II (R = H, Cl; R₁ = Et, CH₂CH:CH₂; R₂ = (CH₂)₂O(CH₂)₂OH, (CH₂)₂O(CH₂)₂O₂CMe; R₃ = (CH₂)₃SO₃H.C₅H₁₀NH, (CH₂)₃SO₃Na) at 1.0 .times. 10-5-1.0 .times. 10-3 mol/mol Ag halide. Thus, to a gelatin-Ag(Br,I) emulsion (1.2 mol % AgI; 1.3 .mu. particle size; gelatin/Ag = 0.4; 0.75 mol Ag salt/kg emulsion) contg. 5-methyl-7-hydroxy-s-triazolo[1, 5-a]pyrimidine as stabilizer were added I (R = (CH₂)₄SO₃Na; R₁ = Et; R₂ = (CH₂)₄SO₃-) 6 .times. 10-5 and II (R = H; R₁, R₂ = Et; R₃ = (CH₂)₄SO₃Na) 4 .times. 10-5 mol/kg emulsion and the emulsion coated on a poly(ethylene terephthalate) support at 3.8 g Ag/m². The emulsion was then coated with a gelatin protective layer at 1 g/m², placed between 2 intensifying screens contg. Gd₂O₂S, exposed (25 mR), developed, fixed, washed, and dried to show a relative sensitivity of 123 and fog of 0.03 vs. 85 and 0.06 for a control contg. III 6 .times. 10-5 and IV 4 .times. 10-5 mol/kg emulsion.

ST benzoxacyanine dye sensitizer radiog film; spectral sensitizer

IT benzoxacyanine dye; cyanine dye spectral sensitizer

IT Photographic sensitizers
(benzoxacyanine dye combinations as, for radiographic film)

IT Radiography
(photographic films for, spectral sensitization of, with benzoxacyanine dye combinations)

IT 50663-38-2 53134-50-2 55036-60-7 ***58202-11-2***
63339-62-8 ***63339-63-9*** ***63339-64-0*** 63339-66-2
RL: USES (Uses)
(photographic spectral sensitizer combinations contg., for radiographic film)

L11 ANSWER 34 OF 34 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1973:65200 CAPLUS
DN 78:65200
ED Entered STN: 12 May 1984
TI Sensitization of direct positive photographic emulsions
IN Ohkubo, Kinji; Masuda, Takao; Shiba, Keisuke; Hinata, Masanao; Sato, Akira; Ogawa, Akira
PA Fuji Photo Film Co., Ltd.
SO Ger. Offen., 24 pp.
CODEN: GWXXBX
DT Patent
LA German
IC G03C
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2164275	A	19720713	DE 1971-2164275	19711223
PRAI	JP 1970-121455	A	19701219		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 2164275	IC	G03C

GI For diagram(s), see printed CA Issue.

AB For the prepn. of printing masters with increased contrast from blueprint or diazo copies using Hg lamps with yellow filter, which can be handled in fluorescent room illumination, high sensitivity at 546 and 577 nm and low sensitivity at 366, ***405***, and 436 ***nm*** are desirable. This sensitivity can be provided by 1-50 mg/kg emulsion of indolinooxycarbocyanines, whose action is enhanced by Rh salts. Thus, (NH₄)₃RhCl₆ 10 mg was added to 1 kg of an emulsion with AgCl 96 mole %, AgBr and AgI 2% each. The pH was adjusted with Na₂CO₃ to 8.5 and the emulsion prefogged by heating with 1% aq. HCHO 10 ml for 80 min. After adjustment of the pH to 6 with citric acid, Pinakryptol Yellow 10 mg and 4 mg of I were added. The sensitivity max. was at 545 nm. Handling of the coated product for 40 sec in 50 lx ambient fluorescent illumination and in a darkroom revealed no differences.

ST direct pos photog sensitizer; cyanine sensitizer direct pos

IT Photographic emulsions
(direct-pos., with low uv sensitivity for safe handling under fluorescent light)

IT Photographic sensitizers
(indolinooxycarbocyanine dyes as, for direct-pos. emulsions)

IT 15336-18-2

RL: USES (Uses)

(photog. sensitizers from indolinooxycarbocyanine dyes and, for direct-pos. emulsions)

IT ***1054-00-8***

RL: USES (Uses)

(photog. sensitizers from rhodium salts and, for direct-pos. emulsions)

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(FILE 'HOME' ENTERED AT 15:25:35 ON 08 DEC 2005)

FILE 'STNGUIDE' ENTERED AT 15:25:41 ON 08 DEC 2005

FILE 'HOME' ENTERED AT 15:25:45 ON 08 DEC 2005

FILE 'REGISTRY' ENTERED AT 15:25:55 ON 08 DEC 2005

L1 STRUCTURE UPLOADED

L2 STRUCTURE UPLOADED

L3 12 S L1 SSS FULL

L4 3644 S L2 SSS FULL

FILE 'CAPLUS' ENTERED AT 15:26:57 ON 08 DEC 2005

L5 21 S L3

L6 2443 S L4

L7 3 S (OPTICAL OR LASER OR INFORMATION) AND L5

L8 322 S (OPTICAL OR LASER OR INFORMATION) AND L6

L9 25 S L8 AND ((OPTICAL OR LASER OR INFORMATION) (5A) (MED? OR DISK OR

L10 71 S (L6 OR L5) AND (390 OR 395 OR 400 OR 405 OR 410 OR 415 OR 420

L11 34 S (L6 OR L5) AND ((390 OR 395 OR 400 OR 405 OR 410 OR 415 OR 42

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

247.77

570.91

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-45.26

-45.26

STN INTERNATIONAL LOGOFF AT 15:31:27 ON 08 DEC 2005